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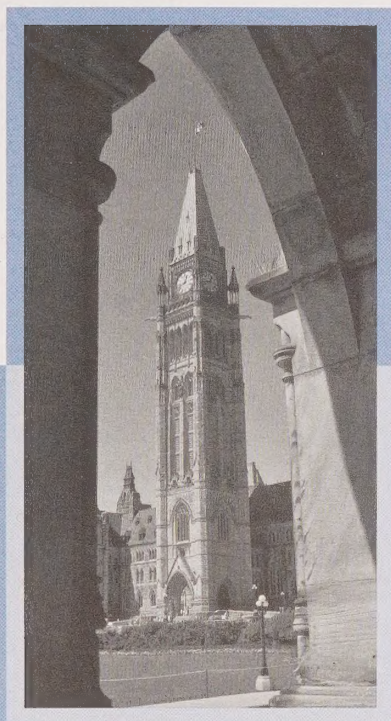






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Spring 2012



## Report of the Auditor General of Canada to the House of Commons

### CHAPTER 1

#### Border Controls on Commercial Imports



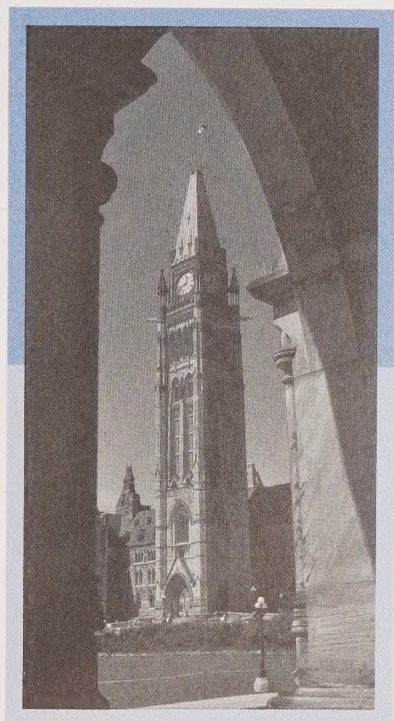
Office of the Auditor General of Canada







Spring 2012



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### CHAPTER 1

#### Border Controls on Commercial Imports



Office of the Auditor General of Canada

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Distribution Centre  
240 Sparks Street  
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K1A 0G6

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## **CHAPTER 1**

### **Border Controls on Commercial Imports**

## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance;
- gather the evidence necessary to assess performance against the criteria;
- report both positive and negative findings;
- conclude against the established audit objectives; and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.



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# Border Controls on Commercial Imports

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## Main Points

### What we examined

Under various acts and regulations, federal government organizations are responsible for ensuring the safety of commercially imported consumer goods that have been identified as a risk to the health and safety of Canadians. The Canada Border Services Agency (CBSA) is tasked with ensuring that commercially imported consumer goods enter Canada in conformity with applicable laws and regulations.

To achieve this, the CBSA works with other federal government organizations to implement controls at the border. Controls at the border include administration of import requirements (for example, permits and authorizations), detection and interception of shipments targeted by federal organizations as high risk or non-compliant, and examination of selected shipments for admissibility into Canada. These controls are part of a broader product safety regime that also includes both pre- and post-border controls, such as licensing and market surveillance, and is supported by importers' voluntary compliance. The regime is intended to control any high-risk products that are allowed to enter the country and thereby help ensure the safety of imported products in the marketplace.

We examined the part of the product safety regime that is implemented at the border. Looking at selected commercially imported goods—including fertilizers, health products, pest control products, consumer products, consumer fireworks, vehicles, and tires—we examined how the CBSA, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada work together to ensure that products comply with applicable legislation when they enter Canada.

Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

**Why it's important**

The volume of imports into Canada is so large that it is not practical for federal organizations to apply border controls to every shipment, nor is it necessary. According to the CBSA, it processed and released 13 million shipments of commercial products in the 2010–11 fiscal year, about four million of which were subject to federal import requirements. Federal organizations must balance the requirement to examine shipments with facilitating the free flow of goods. To do this, they need to have systems and practices that can identify and concentrate on high-risk shipments of commercially imported products.

Potentially unsafe products entering Canada without appropriate controls carry risks that could include illness and death. Even a less serious incident can have a significant effect on Canadian consumer confidence in imported products.

**What we found**

- In most cases, imported consumer goods in our audit that pose a risk to the health and safety of Canadians are adequately controlled at the border by the Canada Border Services Agency, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada. With a few exceptions, the administration of import requirements and automatic targeting of high-risk shipments are working as intended.
- In the small percentage of cases where goods that did not meet import requirements were allowed to enter the country, most were products for which there was no agreement in place between Health Canada and the CBSA. While the CBSA has formal arrangements with the three other organizations in our audit, as yet it has no formal agreement with Health Canada that documents respective roles, responsibilities, policies, and procedures for implementing controls on several products under Health Canada's responsibility, such as medical devices and pest control products. Until there is a formal agreement, border services officers do not have consistent instructions on procedures to follow for those products.
- Border lookouts and examinations are reserved for higher-risk shipments and they consume resources, yet their results are poorly documented. For example, examination results were recorded incorrectly or incompletely in 40 percent of cases we examined. Consequently, we could not determine whether the examinations are working as intended, nor can the organizations requesting them. Moreover, among the audited organizations there are gaps in the monitoring of all three border controls. For example, the CBSA's target monitoring reports are inaccurate and incomplete. These gaps



make it difficult for federal organizations to know how well the controls are working and where resources and effort can be directed most effectively to manage risk.

**The entities have responded.** The entities agree with all of the recommendations. Their detailed responses follow the recommendations throughout the chapter.



## Introduction

**1.1** Each year, millions of imported products cross Canada's borders, destined for the Canadian marketplace. Many commercial products must meet specific requirements defined in federal legislation before they can be imported into Canada, especially those that have been identified as a risk to the health and safety of Canadians. Various federal organizations, such as the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada, and Transport Canada, administer this legislation. They have established product safety controls before goods are imported, during the importing process, and after products have entered the country. This regime is intended to control any high-risk products that are allowed to enter the country and thereby help ensure the safety of imported products in the marketplace.

**1.2** Without appropriate controls, some products could enter Canada that may present serious risks to the health and safety of Canadians. Even a less serious incident can have a significant effect on Canadian consumer confidence in imported products. Imported consumer goods have attracted more attention since 2007, when contaminated toothpaste and toys with lead paint and magnetic parts that could cause choking entered the country. As a result, in December 2007, the Prime Minister announced the Food and Consumer Safety Action Plan. The plan provided additional resources to Health Canada, the CFIA, the Public Health Agency of Canada, and the Canadian Institutes of Health Research to improve controls at all stages of the product safety regime. The plan focused on the following three key areas:

- Active prevention initiatives included enhanced guidance for industry on regulatory requirements, steeper fines and penalties, development of safety standards, and more accessible consumer safety information.
- Targeted oversight initiatives included enhanced licensing and compliance verification, improved surveillance, and mandatory reporting of adverse events and incidents.
- Rapid response initiatives included risk communication to federal organizations and the public and the power to recall products from the marketplace.

**1.3** The three border controls we examined in this audit—administration of import requirements, targeting of high-risk shipments, and examinations—support targeted oversight and rapid response.



**Release**—A decision by the Canada Border Services Agency to allow goods to leave customs control and enter the Canadian marketplace. This may occur at border points of entry or at inland customs offices.

### Shared federal responsibility for controlling imports of consumer goods

**1.4** The Canada Border Services Agency (CBSA) is required to ensure that commercially imported consumer goods enter Canada in conformity with applicable legislation. The *Customs Act* requires that all imported goods be reported to the CBSA and makes the Agency responsible for determining whether to **release** the goods into Canada. Border services officers have the power to examine, detain, or seize imported goods if they suspect non-compliance with legislation, including laws under the jurisdiction of other federal organizations. All these other federal organizations must therefore collaborate with the CBSA to ensure that goods entering Canada meet the requirements of the legislation they administer.

**1.5** In the 2010–11 fiscal year, the CBSA processed 13 million shipments of commercially imported products. In addition to being subject to the requirements of the *Customs Act*, the CBSA estimates about four million of these commercial import transactions also fell under one or more other federal laws or regulations. Federal organizations cannot examine every shipment. They must balance the requirement to examine shipments with facilitating the free flow of goods. To do this, federal organizations need to have systems and practices that can identify and concentrate on high-risk shipments of commercially imported products.

**1.6** In the 2010–11 fiscal year, the five audited organizations reported they spent approximately \$200 million to administer program activities intended to ensure the safety of the imported products included in the scope of the audit. This amount includes the border controls examined by the audit.

**1.7** Exhibit 1.1 summarizes the goods included in the scope of our audit, the laws that regulate them, and the four federal organizations responsible for controlling the importation of these goods. The exhibit also summarizes the import requirements, the requirements administered by CBSA officers, and the risks to Canadians if the goods do not meet these requirements.

Exhibit 1.1 Import requirements for goods included in the audit

Federal organizations responsible for imported goods and their relevant legislation	Import requirements	Actions required at the border by the Canada Border Services Agency	Risks of non-compliance with requirements
<b>Canadian Food Inspection Agency (CFIA)</b>  <i>Fertilizers Act</i> and associated regulations  The CFIA must ensure that imported regulated fertilizer and supplement products are safe for humans, plants, animals, and the environment; effective for their intended purpose; and properly labelled.	<b>Fertilizers and supplement products</b>		
	Import requirements vary by nature of the product, country of origin, and use of the product. These could include registering products, obtaining permits, and adhering to specific packaging and labelling requirements. Some low-risk products are exempt from import requirements.	Border services officers are expected to review the shipment's supporting documentation and the request for release. Low-risk imports do not require any action by border services officers.	A toxic fertilizer or supplement could have an immediate or long-term harmful effect on the environment, might endanger the environment on which human life depends, or might endanger human life or health.
<b>Health Canada</b>  <i>Food and Drugs Act</i> , the <i>Controlled Drugs and Substances Act</i> , the <i>Pest Control Products Act</i> , the <i>Canada Consumer Products Safety Act</i> , the <i>Hazardous Products Act</i> , and their associated regulations  Health Canada is responsible for protecting the public by addressing or preventing risks to human health or safety that imported products pose.	<b>Health products (including drugs, natural health products, and medical devices)</b>		
	Import requirements vary by product, but may include market authorization (human-use drugs, natural health products, some medical devices), obtaining permits, site or establishment licensing (human-use drugs, natural health products, some medical devices), and adhering to packaging and labelling requirements.	Border services officers are expected to contact Health Canada if they have a compliance concern or need more information. However, if the shipment contains a controlled substance, the officer must verify the import permit against the quantity for each individual shipment, and ensure that the importer is licensed.	Unauthorized health products may be ineffective, unsafe, and of poor quality. For example, severe side effects might occur if Canadians take an unauthorized drug or natural health product.
	<b>Regulated consumer products (toys, child care items, cribs, cradles, strollers, consumer chemicals, and cosmetics)</b>		
	Import requirements include labelling and meeting safety and performance standards. Cosmetic preparations are also subject to the <i>Food and Drugs Act</i> and its regulations regarding composition, safety, labelling, and advertising.	Border services officers are expected to contact Health Canada if they have compliance concerns or need more information.	Consumer products that do not meet Canadian regulations could cause injury or death.
	<b>Unregulated consumer products</b>		
	There is no import requirement for unregulated consumer products.	Border services officers have no requirements concerning these products unless Health Canada has identified a product as high risk and asked the Agency to target it for inspection. Officers are then to follow instructions that Health Canada provides.	Consumer products, such as ski helmets, that do not meet Canadian standards could cause injury or death.

Exhibit 1.1 Import requirements for goods included in the audit (continued)

Federal organizations responsible for imported goods and their relevant legislation	Import requirements	Actions required at the border by the Canada Border Services Agency	Risks of non-compliance with requirements
<b>Health Canada (continued)</b>  Products must bear the approved label for sale in Canada, and an import declaration form must be included at the time of release.	<b>Pest control products</b>		
	Products must bear the approved label for sale in Canada, and an import declaration form must be included at the time of release.	Border services officers are expected to contact Health Canada if they have a compliance concern or need more information.	An unregistered pest control product may be unsafe for any use, and often does not contain precautions or instructions in either of Canada's official languages. This could lead to accidental misuse or injury.
<b>Natural Resources Canada (NRCan)</b>  <i>Explosives Act</i> and associated regulations  NRCan is responsible for ensuring that only fireworks that are safe and authorized under the explosives regulations are imported into Canada.	<b>Consumer fireworks</b>		
	The product must be on the list of authorized explosives and have an import permit.	Border services officers are expected to validate the Explosives Import Permit. If the shipment is not as described in the permit or the goods are not accompanied by a permit, officers are to detain the explosives and refer them to NRCan for review.	Unauthorized fireworks could result in injury, property damage, or death.
<b>Transport Canada</b>  <i>Motor Vehicle Safety Act</i>  Transport Canada regulates the importing of vehicles and vehicle products to reduce the risk of death, injury, and damage to property and the environment.	<b>Vehicles</b>		
	Imports must be accompanied by a vehicle import form, a statement of compliance label, a vehicle identification number, a certificate of title, and manufacturer's certificate of origin or salvage title.	Border services officers are expected to ensure that vehicles meet all import requirements, that the vehicle form is completed correctly, and that they stamp the form.	Foreign manufacturers must design and build vehicles that meet standards and regulations under Canada's <i>Motor Vehicle Safety Act</i> . Vehicles that do not meet standards increase the risk of death, injury, and damage to property and the environment.
	<b>Tires</b>		
	On-road new tires must be accompanied by a declaration that the tire complies with Canadian Motor Vehicle Tire Safety Regulations. On-road used tires require a United States Department of Transportation (DOT) symbol on the tire and the identification number.  Off-road used tires must display an "Off-road use only" designation.	Border services officers are expected to verify the importer's declaration of compliance, and the DOT symbol (on-road used) or off-road use designation.	On-road tires must meet Canadian or United States standards. Tires that do not meet standards increase the risk of a crash or injury.



## Border control processes

**1.8** Federal organizations responsible for ensuring that imported goods meet all Canadian requirements also rely on importers' voluntary compliance with federal legislation. Commercial clients (importers, brokers, carriers, and freight forwarders) report the goods they want to import by submitting detailed information about the goods and the importer before or upon arrival at the border. Commercial clients are required by legislation to provide accurate and complete information. Border services officers review this information to decide whether to release the goods into Canada.

**Target**—An automated notice that **ACROSS**, the Canada Border Services Agency's importing information system, issues whenever an importer's business number or other data triggers an alert. Officers must analyze and follow instructions accompanying the target. Targets can also be issued via email from Agency headquarters directing officers to take specific action regarding shipments.

**ACROSS**—The Accelerated Commercial Release Operations Support System of the Canada Border Services Agency, which enables importers and brokers to transmit information about their imports electronically. A border services officer reviews the information, decides whether to release the shipment, and sends the response back to the importer or broker electronically.

**Referral**—A request from the Canada Border Services Agency to an appropriate federal organization to validate the admissibility of a shipment based on legislative requirements. Referrals are communicated by phone, facsimile, or email.

**1.9** Federal organizations may request that the CBSA target and intercept shipments for examination at the border. To determine whether a shipment represents a high risk and should be detained for examination, border services officers use these targets, automated systems, their own judgment, and advice from other federal organizations. If an officer decides that an examination is not required, the Agency releases the goods. If the officer decides an examination is required, the officer directs the goods to an examination facility, where the goods are released only if they pass the examination.

**1.10** The CBSA may refer information about the shipment to the appropriate federal organization for document review; or it may conduct a physical examination on behalf of the appropriate federal organization; or an inspector from the appropriate federal organization may conduct a physical examination. Commercial shipments can be examined at a facility at the port of entry or, in certain cases, inland.

## Focus of the audit

**1.11** The objective of the audit was to determine whether the Canada Border Services Agency (CBSA), the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada (NRCan), and Transport Canada control, at the border, selected commercially imported products that pose a risk to the health and safety of Canadians.

**1.12** We examined the product safety regime that is implemented at the border. We did not audit, and therefore cannot comment on, the effectiveness of pre- and post-border controls or voluntary compliance. Controls before goods are imported and after they have entered the country have been the subject of other audits: most recently, in the 2011 Fall Report of the Auditor General, Chapter 4, Regulating Pharmaceutical Drugs—Health Canada, and the 2011 June Report of

**Trusted trader programs**—Three Canada Border Services Agency programs (Free and Secure Trade, Partners in Protection, and Customs Self Assessment) that designate certain companies as trusted and low risk because they have met certain system and risk requirements and are subject to Agency audit.

the Auditor General, Chapter 6, Regulating Medical Devices—Health Canada. We also did not audit goods imported as part of the CBSA's **trusted trader programs**.

- 1.13** We examined federal organizations' systems and practices for
- administering import requirements (permits, licences, certificates, or other authorizations);
  - targeting commercially imported consumer goods that pose a risk to the health and safety of Canadians; and
  - examining commercially imported consumer goods that pose a risk to the health and safety of Canadians.

**1.14** More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations and Recommendations

### Administering import requirements

**1.15** We examined whether the Canada Border Services Agency (CBSA), the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada (NRCan), and Transport Canada administer import requirements for commercially imported products that pose a risk to the health and safety of Canadians by

- documenting the administration of requirements;
- following the roles, responsibilities, policies, and procedures for administering import requirements; and
- monitoring the administration of requirements, as Treasury Board policies require.

**Most systems and practices for administering import requirements are well documented, but some need improvement**

**1.16** Under the *Canada Border Services Agency Act*, the CBSA may enter into agreements or arrangements with federal organizations to provide services, such as administering import requirements, on their behalf. Such agreements document the import requirements, the products to which they apply, and the roles and responsibilities of the federal organizations involved in administering these requirements. Cooperation and coordination between the CBSA and the CFIA, NRCan, and Transport Canada are outlined in a series of bilateral memoranda of understanding (MOUs) that describe each party's roles and responsibilities for collecting and exchanging information, targeting high-risk shipments, examining shipments, and monitoring compliance.



**1.17** Cooperation and coordination between the CBSA and federal organizations are also described in a series of internal CBSA memoranda, called D Memoranda. These documents outline the legislation, policies, and procedures that the CBSA uses to administer specific customs programs, including the importation of certain goods that fall under the jurisdiction of other federal organizations. These D Memoranda also outline roles, responsibilities, and service standards. For the products included in our audit, current D Memoranda exist for those products under the responsibility of the CFIA, NRCan, and Transport Canada, and for some Health Canada products.

**1.18** Between 2000 and 2004, the CBSA stopped administering several Health Canada requirements at the border, including those for medical devices and pest control products and some for human-use drugs and controlled substances. These requirements were paper-based and required border services officers to process permits and other documents, and forward them to Health Canada. This practice was not consistent with the CBSA's efforts to automate the importing process. The CBSA's decision to stop administering Health Canada's requirements meant that although legislation required importers to provide permits or import declaration forms with their shipments of some products, border services officers no longer reviewed the permits or forms.

**1.19** In 2003, Health Canada expressed concerns about the impact that the CBSA decision would have on the Department's ability to fulfill its mandate to control imports of some products. The two organizations therefore agreed to increase information exchange and targeting and to finalize an umbrella MOU that was already under development. The goal of the umbrella MOU was to clarify—for drugs, chemicals, pest control products, medical devices, and consumer products—the roles and responsibilities for collecting and exchanging information, targeting, examining shipments, and monitoring. The MOU was signed in November 2011, but no annexes have been agreed on. The annexes are an integral part of the MOU because they clarify roles, responsibilities, policies, and procedures of each participant for each program. Thus, while the MOU was an important first step, until the annexes are agreed on, the goal established in 2003 to clarify roles and responsibilities for control activities has not been met.

**1.20** Health Canada still expects that border services officers will refer shipments if they have any concerns about compliance with the Department's import requirements. The CBSA, however, does not have the same expectation of its officers for all Health Canada products. As explained in the following section, we found that, in most cases where goods that did not meet their import requirements

were allowed to enter the country, they were products for which there is no agreement in place between Health Canada and the CBSA. A formal agreement would provide all border services officers with correct contact information and consistent instructions on procedures to follow, including when to refer a product and to which Health Canada program.

**1.21 Recommendation.** To define and clarify roles, responsibilities, policies, and procedures for administering import requirements, the Canada Border Services Agency and Health Canada should prepare and finalize annexes for all programs identified in their 15 November 2011 umbrella memorandum of understanding. The Canada Border Services Agency should then document or update instructions to border services officers for these programs and products.

**The Agency's and the Department's response.** Agreed. The Agency and the Department will work together to complete annexes to the umbrella memorandum of understanding with related procedures that clearly define the roles and responsibilities of each organization for the border administration of the Department's import requirements. One to two annexes would be completed by March 2013, with all completed by March 2014.

#### **Import requirements were administered correctly, with a few exceptions**

**1.22** We assessed whether the federal organizations included in our audit follow the roles, responsibilities, policies, and procedures for administering import requirements. We examined a representative sample of 57 import transactions for regulated commercially imported products that were processed during May 2011. With respect to NRCan, we examined six randomly selected import transactions for fireworks, as there were too few fireworks transactions in May 2011 to include them in the representative sample.

**1.23** We found that the roles, responsibilities, policies, and procedures for administering import requirements were followed, except for two of the six fireworks transactions. When import requirements are not administered correctly, it does not always mean that the good is not compliant with safety regulations. For example, if an importer did not submit the required permit, it could mean either that the importer does not have a permit or that the importer has a permit but did not include it with the shipment. We therefore asked NRCan and the CBSA to review the transaction information for these two cases. They confirmed that, for one fireworks transaction, the importer did not have the necessary permit.

**1.24** For five percent of transactions in our representative sample, administrative procedures were not strong enough for border officers to identify non-compliant goods. As a result, goods were allowed to enter the country, even though they did not meet their import requirements. These included a small quantity of an unregistered pest control product, and Class I medical devices (the lowest-risk class under the Medical Devices Regulations) when the importer did not have an appropriate establishment licence to demonstrate that it has the proper systems in place to safely manage the distribution of the device. These are goods for which there is currently no agreement between Health Canada and the CBSA to administer import requirements at the border.

**The Canada Border Services Agency's framework to monitor administration of import requirements needs improvement**

**1.25** The third element we examined, to assess whether the federal organizations included in our audit are administering import requirements at the border as intended, was their monitoring systems and practices.

**1.26** In 2009, the CBSA published an internal audit report on its administration of import requirements. The audit focused on a different set of controlled goods than those examined in our audit, but also found gaps in the administration of import requirements at the border. The audit therefore recommended that the Agency improve its monitoring of border controls. In response, the CBSA implemented a process monitoring framework.

**1.27** The framework is a checklist that requires supervisors to verify whether border services officers ensure that import requirements are met. The methodology provides different options to supervisors to conduct monitoring, depending on the size and complexity of the port of entry. However, for the results to be compared over time or from one location to another, supervisors need to report details on the methodology they used. We found, in most cases, they did not. We also found that there were few reports on results. Because the framework requires that only problems be reported, we could not determine whether the existence of few reports meant there were no problems to report, or the monitoring work had not been conducted. As a result of these design and implementation weaknesses, the framework does not provide the CBSA with the monitoring information it needs to detect changes in the effectiveness of border controls.

**1.28** The CFIA also has a process that is explicitly designed to monitor compliance with importing processes and requirements for fertilizers



and supplements. The three other federal organizations rely mainly on their post-border monitoring processes, such as market surveillance, for assurance that their requirements are administered at the border as intended. We found that, despite the shared responsibility to control imports at the border, the CBSA and the other federal organizations included in our audit did not systematically share their monitoring information with each other. Sharing information about whether import requirements are being met, how often, and what types of problems need attention would help federal organizations identify whether changes to the effectiveness of this control have occurred, and where to direct resources and effort.

**1.29 Recommendation.** The Canada Border Services Agency should ensure that the Process Monitoring Framework reporting includes enough information for the Agency to assess whether border controls are working as intended, share the results with relevant federal organizations, and act on the results.

**The Agency's response.** Agreed. The Agency will replace the Process Monitoring Framework with a new review structure. The new structure will streamline the Agency's review process by aligning the review criteria and strategy with high-risk areas of business and audit priorities that affect port of entry operations nationally. The new structure will also include a log that records when issues and results are communicated to relevant organizations to ensure that issues are addressed. The Agency will develop and implement the new review structure by July 2012.

### Targeting imported consumer goods

**1.30** When federal organizations identify high-risk commercially imported products that fall under their respective jurisdiction, they ask the Canada Border Services Agency (CBSA) to target and intercept these shipments. Targets are requested when, for example, an importer has previously brought in goods that were not properly declared or the federal organization has determined that a good is dangerous.

**1.31** We examined whether the CBSA, the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada (NRCan), and Transport Canada document systems and practices for conducting targeting activities, follow targeting instructions as intended, and monitor the results.

**1.32** There are two types of targets: automated targets and border lookouts. An automated target is entered into ACROSS and is used to intercept a shipment based on targetable data, such as an importer's business number. ACROSS automatically flags a shipment for

interception if the information the importer provides matches the characteristics defined in the target. Border services officers are expected to assess the target instructions and examine the shipment or refer it to the appropriate federal department, if required.

**1.33** However, shipments that the CBSA and the other federal organizations would like to target cannot always be identified in ACROSS. Some of the data items that ACROSS uses to target are not specific enough to identify all goods with import requirements. In these circumstances, the CBSA issues a border lookout, which is an instruction to border services officers to take specific action when they identify a shipment meeting established criteria. Border lookouts are communicated by email and all officers are expected to be aware of active lookouts.

**1.34** For the products included in our audit, for the period between November 2010 and June 2011, there were 250 automated targets and 47 border lookouts, almost all of which were on products that Health Canada is responsible for.

#### **Instructions are being followed for automated targets, with a few exceptions**

**1.35** We found that all five federal organizations document the way automated targets and border lookouts are to be conducted and follow the roles, responsibilities, policies, and procedures for creating targets. The CBSA then tests whether the automated target will intercept shipments as intended.

**1.36** To assess whether border services officers followed the target instructions, we selected a representative sample of 50 shipments from those intercepted as a result of an automated target between 1 November 2010 and 30 June 2011. For 84 percent of transactions, officers followed the instructions that accompanied the target. In 12 percent of transactions, all of which were targeted on behalf of Health Canada, border services officers detained and examined the shipments but did not refer them to the Department. Rather, they concluded that the goods did not match the target and released them. We asked Health Canada to verify whether its target instructions had been correctly followed in these cases. The Department stated that they had not been correctly followed and that it expected information about the shipments to be referred. However, its target instructions did not state that there was no room for officers' discretion. These results reinforce the need for the two organizations to clarify their procedures for border controls.

**1.37** For the other four percent of transactions, also Health Canada targets, we found the goods were released without being detained, examined, or referred to the Department as instructed. The transactions included a natural health product that was suspected of containing lithium, which poses a health risk, and an importer whose shipments were all to be detained because of a history of non-compliance. For this four percent, CBSA officials could not explain why border services officers did not follow the target instructions.

### **Information to monitor targets is inaccurate and incomplete**

**1.38** The CBSA usually maintains automated targets and border lookouts for a limited period of time. It then asks the requesting federal organization whether the target should be removed, revised, or renewed. The requesting organization therefore needs a process to monitor the effectiveness of the target to guide its decision. This includes assurance that information about targeting activities and results is accurate and complete.

**1.39** The CBSA's National Risk Assessment Centre (NRAC) produces monthly monitoring reports about automated targets that are shared with the relevant federal organizations. However, the Agency does not analyze these reports, although its targeting policies and procedures require that it do so. Moreover, our review of the monthly monitoring reports found that some of the information was inaccurate or incomplete. For example, shipments that met target characteristics were recorded as intercepted, even though they had not been intercepted because the target had expired. As well, examination results included in the reports did not always show whether targeted shipments were compliant and therefore whether the targets were effective.

**1.40** Transport Canada relies on the NRAC monthly reports to monitor the results of its targets and decide whether to renew, revise, or remove them. The CFIA, NRCan, and Health Canada supplement the monthly reports by directing their inspectors to watch for the targeted products as part of their market surveillance activities.

**1.41** Even though border lookouts are considered as high a risk as automated targets, we found that their results are not documented. Moreover, the federal organizations included in the audit do not have monitoring systems and practices in place to know whether these lookouts are implemented correctly or result in the interception of shipments.



**1.42** These gaps in the information about targeting activities and results mean that, despite the time and resources each federal organization involved has invested, accurate and complete information is not available to effectively manage the targeting process.

**1.43 Recommendation.** The Canada Border Services Agency should implement a quality assurance process for its automated target monitoring reports, and develop a means to monitor and report on the effectiveness of border lookouts.

**The Agency's response.** Agreed. The Agency will implement an effective quality assurance and monitoring process that will ensure accurate and complete reporting of results of other federal organizations' targets and border lookouts on a timely basis. This will allow for timely sharing of information with relevant federal organizations about the effectiveness of the Agency's actions on their behalf. Given that this process must reflect the business processes being introduced with the Agency's implementation of a new targeting model, scheduled to begin on 1 April 2012, these measures will be completed by 30 June 2013.

## Examining imported consumer goods

**1.44** Examinations are conducted to confirm that shipments comply with requirements. There are two types of commercial examinations: document review and physical examination. During a document review, the Canada Border Services Agency (CBSA) sends the relevant federal organization the information that the commercial clients have submitted, including photocopies of labels or photographs the officers take of the product. The organization reviews the information and recommends that the CBSA refuse the shipment, release it, or examine it further. A physical examination ranges from a visual observation of the shipment to laboratory testing.

**1.45** Usually, border services officers conduct the examinations. As a result, the officers rely on instructions from the federal organizations to understand what to look for during the examinations.

**1.46** We examined whether the federal organizations included in our audit conduct document reviews and physical examinations at the border by

- documenting the way examinations are to be conducted;
- following the roles, responsibilities, policies, and procedures for examinations; and
- monitoring examination activities and results.

**Procedures for examining high-risk products are well documented, with some exceptions**

**1.47** The CBSA has a Customs Enforcement Manual, D Memoranda, and memoranda of understanding with other federal organizations that provide border services officers and superintendents with information about the policy, guidelines, and procedures for examining commercial shipments. These documents also include any service standards that have been agreed to between the CBSA and the other federal organizations. The memoranda generally instruct border services officers to contact the relevant federal organization for more information, and provide contact details.

**1.48** More detailed instructions on how to examine particular shipments are provided in target instructions that explain what action border services officers are to take once they have intercepted a shipment, or in the response federal organizations provide once officers refer a shipment to them. To assess whether the instructions that the federal organizations provided were the same as those that the CBSA entered in ACROSS, we selected a representative sample of 44 targets from those requested by Health Canada between November 2010 and June 2011. We also examined all 8 targets requested by the Canadian Food Inspection Agency (CFIA), Natural Resources Canada (NRCan), and Transport Canada for the same period. We found that most of the instructions were the same, but for five percent of the 44 Health Canada targets, the instructions changed or excluded information. For one target, for example, the request from Health Canada was to detain two health products, but the CBSA's target instructions listed only one of the products.

**Only Health Canada monitors referrals of shipments from the Canada Border Services Agency**

**1.49** The CBSA, the CFIA, NRCan, and Transport Canada do not have systematic processes for recording when and why a border services officer refers a shipment, which shipment was referred, or any direction provided. As a result, the organizations cannot assess whether the CBSA followed their recommendations or whether they responded to referrals within agreed service standards. Therefore, we were unable to assess whether these federal organizations followed policies and procedures for referrals.

**1.50** In 2010, Health Canada established customs border centres in British Columbia and Ontario as pilot projects. The units are staffed by Health Canada officials who respond to and track CBSA referrals.

Prior to December 2011, the centres provided a single point of contact for all Health Canada product control programs, only in these two regions. In other regions, border services officers were still required to contact the Health Canada program responsible for each type of good directly, and Health Canada did not systematically document or track referrals. In December 2011, Health Canada expanded the single point of contact to all regions.

**1.51** As a result of their more systematic approach to tracking referrals, the border centres can determine whether they meet the service standards that Health Canada set to respond to CBSA requests for assistance.

**1.52** Health Canada does not always record which shipment was referred by the CBSA, but the information the Department collected was sufficient to allow us to assess whether the CBSA followed the Department's recommendations and refused shipments of health products. We reviewed a representative sample of 49 refusal recommendations. We found that the CBSA took the action recommended by Health Canada in 96 percent of transactions. However, in four percent, shipments of natural health products were released, even though Health Canada recommended the shipments be refused entry into Canada.

**1.53 Recommendation.** The Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada should assess Canada Border Services Agency referrals systematically to determine whether responses are provided within agreed service standards and whether recommendations are followed. Each organization should use the results of this assessment to determine whether further action is required.

**The Canadian Food Inspection Agency's response.** Agreed. The Canadian Food Inspection Agency will conduct an assessment of its fertilizer referral process to the Canada Border Services Agency by Fall 2012 to determine if a formal monitoring program is required.

**Health Canada's response.** Agreed. Health Canada will develop service standards for each program as part of the development of program annexes with the Canada Border Services Agency (see response to recommendation 1.21). Health Canada also commits to monitoring i) compliance with agreed upon service standards, and ii) referrals from the Canada Border Services Agency in order to determine if the Agency is following Health Canada recommendations.



**Natural Resources Canada's response.** Agreed. For the Explosives Program, a new recording system was developed in October 2011 and is currently being implemented by NRCan officers located in Ottawa for all referrals coming from border services officers. This is also being communicated by the end of Quarter 1, 2012, to all NRCan officers who may be contacted by border services officers.

**Transport Canada's response.** Agreed. Transport Canada has consulted with the Canada Border Services Agency and has agreed to review the appropriateness of current service standards with respect to referrals and make changes as required to the Memorandum of Understanding between the two organizations. The Department will also review the requirement to provide written confirmation regarding the status of vehicles within a one-hour time frame. This is expected to be completed by July 2012.

Transport Canada and the Canada Border Services Agency have agreed that Transport Canada will create a tracking system to record referrals where Transport Canada, or its designated representative, has instructed the Canada Border Services Agency to deny entry of any goods referred. The system will record the Agency transaction number, the vehicle identification number(s), and the recommendation provided to the Agency. This system is expected to be in place by April 2012.

Transport Canada will compare the referrals contained in the tracking system to those imported vehicles found to be inadmissible in any post-importation audit, and will forward these results to the Canada Border Services Agency quarterly for comment and resolution.

#### **Information is lacking on whether physical examinations produce intended results**

**1.54** The CBSA has a Border Risk Management Plan, which aims to efficiently allocate the Agency's resources to identify, interdict, and mitigate threats to border security. The plan states that accurately recorded results of physical examinations are necessary if the CBSA is to implement its risk management strategies properly. The CBSA therefore requires border services officers to record examination comments and codes in ACROSS. This information is also necessary to enable the CBSA to monitor whether border services officers have conducted the examinations that the other four federal organizations request.

**1.55** To assess whether officers record examination results correctly, we selected a representative sample of 50 transactions from May 2011 in ACROSS. We also reviewed a non-representative random sample of

five import transactions for fireworks, as there were too few transactions to include them in the representative sample.

**1.56** We found that officers recorded examination results incorrectly or incompletely in 40 percent of transactions in the representative sample, and in all five fireworks transactions. For 20 percent of transactions and three fireworks cases, no examination comments were entered, contrary to CBSA policy. This means that there was no confirmation that the required examination was conducted to verify that the goods were as described and met import requirements. For example, in the case of an imported fertilizer targeted by the CFIA, there was a concern that the product contained phosphite, a substance considered a pest control product. Imported fertilizers containing this substance have different import requirements than other fertilizers. However, no examination results were entered. Therefore, there is no assurance that the border services officers checked to confirm the product did not contain phosphite.

**1.57** For the other 20 percent of transactions and the other two fireworks cases, an incorrect examination code was entered. The CBSA uses examination codes in reports to monitor the quality and effectiveness of examinations by, for example, analyzing the proportions of examinations that find non-compliant shipments. If the codes are inaccurate, the CBSA does not have correct information about the effectiveness of its examination activities.

**1.58** In addition to results generated from examination codes, the CBSA uses its Process Monitoring Framework to monitor whether border services officers documented the results of examinations and followed instructions from federal organizations. However, again, because of weaknesses in the framework, it does not provide the Agency with assurance that results are being recorded as required (see our recommendation in paragraph 1.29).

**1.59** We found a good practice concerning examination results for **border blitzes**. During our audit period, Health Canada conducted one border blitz on goods included in the scope of the audit at five ports of entry in Quebec. After the blitz, Health Canada and the CBSA shared the results of the exercise. In our opinion, sharing blitz results is a valuable way for each organization to understand how importers comply with import requirements and where to direct resources to stop non-compliant shipments in the future.

**Border blitz**—A project coordinated between federal organizations and the Canada Border Services Agency that takes place at a specific port of entry during a limited period of time. It targets shipments of high-risk products through document reviews and physical examinations to determine if these products can be allowed into Canada.

## Single Window Initiative

**1.60** In 2005, the Canada Border Services Agency (CBSA) received \$10 million to develop a Single Window Initiative. It is intended, in part, to improve control at the border by better identifying goods with import requirements, validating permits and other authorizations, and enabling the CBSA to exchange information with other federal organizations to better manage risk. The initiative is also intended to improve the administration of responsible federal organizations' import requirements by allowing importers to submit information on their shipments once, electronically. Twelve federal organizations are participating in the Single Window Initiative.

### **The Single Window Initiative to improve control at the border has achieved few of its goals**

**1.61** We examined whether the Single Window Initiative was well managed according to best practices for information technology projects. We found that the CBSA had met few of its original project timelines and goals, and had not followed the project's oversight process.

**1.62** At the time of the audit, the CBSA had begun sharing commercial customs data electronically with five federal organizations, including three of the federal organizations included in this audit, through a project called Pathfinder. Other Pathfinder links were under development. The project plan, schedule, and cost estimates were not completed until after project development had been under way for two years, and shortly before the initial projects were implemented.

**1.63** For a few programs, exchanging information through Pathfinder meets the goals of the participating federal organizations for the Single Window Initiative. However, for most of their programs, these organizations have concluded that they would benefit from achieving the Single Window Initiative's other goals: better identification of goods, validation of permits and authorizations, and a single point for importers to submit information electronically. These organizations concluded in 2007 that they needed to develop a business case for additional funding. The CBSA initially intended to complete this business case in 2007, with a planned implementation date of 2010. However, the Agency and its partners did not complete necessary analyses in time. New deadlines for the business case (in 2008, 2009, and 2010) were also missed. At the time of the audit, a renewed effort was under way to complete a business case by the end of 2011 as part of the Perimeter Security and Economic Competitiveness Action Plan. In December 2011, the government announced that electronic decision processes would be implemented for Health Canada, the Canadian



Food Inspection Agency, Transport Canada, and Foreign Affairs and International Trade Canada through the Single Window Initiative by December 2013.

## Conclusion

**1.64** We found that, in most cases, the Canada Border Services Agency (CBSA), the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada (NRCan), and Transport Canada adequately control, at the border, selected commercially imported consumer goods that pose a risk to the health and safety of Canadians. Based on our review of transaction information from the CBSA's databases, the controls to administer import requirements and to automatically target high-risk shipments are working as intended. That is, in almost all cases, roles, responsibilities, policies, and procedures were followed.

**1.65** We found, however, that improvements are needed in the management of border lookouts and examinations. Because their results are poorly documented, information was not available for us to determine whether these controls are working as intended. The CBSA does not keep a record of how many border lookouts result in shipments being stopped. As for examinations, although the CBSA requires that officers document examination results, this is not done consistently, and results are not always entered correctly. Consequently, it is not possible to determine whether border services officers carried out examinations in accordance with their instructions. Yet, border lookouts and examinations consume additional time and resources, and are reserved for shipments that are considered high risk.

**1.66** There are gaps in the monitoring practices for all three border controls—administration of import requirements, targeting of high-risk shipments, and examinations. This makes it difficult for federal organizations to know how well these controls are working and where resources and effort can be directed most effectively to manage risk. Specifically:

- The CBSA's Process Monitoring Framework is a checklist that requires supervisors to verify whether border services officers ensure that various border controls are working as intended. However, because of weaknesses in the framework, the results cannot be compared over time or from one location to another, and there were few reports on results.

- The CBSA's target monitoring reports are inaccurate and incomplete.
- The CBSA, the CFIA, NRCan, Transport Canada, and Health Canada in some regions do not have systematic processes for recording when and why a border services officer refers a shipment, which shipment was referred, or any direction provided. As a result, the organizations cannot assess whether the CBSA followed their recommendations or whether they responded to referrals within agreed service standards.

**1.67** The CBSA has formal arrangements with all four federal organizations in our audit. However, respective roles, responsibilities, policies, and procedures for implementing border controls are not yet documented for all Health Canada programs and products. In 2003, the CBSA and Health Canada committed to reaching an agreement that would clarify each party's roles and responsibilities. A memorandum of understanding was signed in November 2011, but none of the annexes that clarify roles, responsibilities, policies, and procedures for each program has been agreed on. We found that, in most cases where goods were allowed to enter the country, even though they did not meet their import requirements, they were products for which there was no agreement in place between Health Canada and the CBSA at the time of the audit. A formal agreement would provide all border services officers with correct contact information and consistent instructions on procedures to follow, including when to refer a product and to which Health Canada program.

**1.68** Although under way since 2005, the Single Window Initiative to control at the border has met few of its original project timelines and goals. As well, the CBSA has not followed the project's oversight process. In the meantime, the improvements that the CBSA says the initiative will make remain unrealized.

## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

### Objectives

To determine whether the Canada Border Services Agency (CBSA), the Canadian Food Inspection Agency (CFIA), Health Canada, Natural Resources Canada (NRCan), and Transport Canada control, at the border, selected commercially imported products that pose a risk to the health and safety of Canadians.

### Scope and approach

The audit scope focused on control at the border, to ensure key controls in the process of importing a shipment into Canada are operating as intended. These controls are the administration of import requirements, the targeting of high-risk shipments, and examinations.

In this audit, we focused on consumer goods imported in significant volumes or those that might be difficult to assess for risk and compliance because of weak systems to flag problems. We therefore included in the scope of the audit the following federal organizations and the goods they regulate:

- the CBSA;
- the CFIA, for fertilizers and supplements;
- Health Canada, for pharmaceuticals, non-prescription medicines, natural health products, medical devices, regulated and non-regulated consumer products, and pest control products;
- NRCan, for consumer fireworks; and
- Transport Canada, for vehicles and tires.

Commercially imported consumer goods refers to those that, with their components, parts, accessories, and packaging, are imported into Canada through the CBSA's commercial stream and that may reasonably be expected to be obtained by an individual and used for non-commercial purposes, including for domestic, recreational, and sports activities.

Goods imported through CBSA's trusted trader programs were excluded from the scope of the audit. We also did not examine the other product control processes that the audited organizations may use to ensure the safety of imported goods, such as the licensing and inspection of manufacturing or distribution facilities, or market surveillance activities. We did not examine the responsible federal entities' processes for issuing licences, permits, or other authorizations needed to import goods, nor their processes for identifying high-risk goods to be targeted by the CBSA.

We interviewed officials, reviewed documents, and conducted process and system walk-throughs at the national headquarters of the five federal organizations included in the scope of the audit. We also interviewed officials and reviewed documents in regional offices of the CBSA, the CFIA, and



Health Canada in British Columbia, Ontario, and Quebec—the regions through which the majority of imported goods enter Canada. We did not visit regional offices of Transport Canada and NRCan, because, for the programs included in our audit, the departments conduct most of their import control activities centrally.

In addition, we conducted file reviews of four representative samples of import transactions.

- To assess whether import requirements were administered as intended, we randomly selected 57 import transactions for goods regulated by the CFIA, Health Canada, and Transport Canada, from a total of 29,951 import transactions for these goods processed in May 2011.
- To assess whether automated target instructions were followed as required, we randomly selected 50 import transactions out of a population of 3,635 import transactions for goods regulated by the CFIA, Health Canada, NRCan, and Transport Canada. These import transactions contained goods that had been intercepted by an automated target between November 2010 and June 2011.
- To assess whether information about examinations was correctly recorded, we randomly selected 50 import transactions out of a population of 2,323 import transactions for goods regulated by the CFIA, Health Canada, and Transport Canada. These import transactions contained goods that had been referred for examination in May 2011.
- To assess whether goods recommended for refusal were refused entry, we randomly selected 49 import transactions out of a population of 1,201 transactions that had been recommended for refusal by Health Canada between November 2010 and June 2011.

Each of the random samples is considered accurate within 10 percent, 9 times out of 10.

We randomly selected six additional fireworks transactions to examine the effectiveness of the controls for the administration of import requirements, and five for examinations. This information could not be obtained from the representative samples, because there were too few NRCan transactions in each of the sampled populations.

To assess whether target instructions were properly entered into ACROSS, we conducted a file review of 44 automated targets from a population of 242 targets requested by Health Canada between November 2010 and June 2011. We also examined all of the 8 automated targets requested by the CFIA, NRCan, and Transport Canada for the same period.

## Criteria

To determine whether the Canada Border Services Agency, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada control, at the border, selected commercially imported consumer goods that pose a risk to the health and safety of Canadians, we used the following criteria:

Criteria	Sources
<p>The federal organizations administer relevant requirements for consumer goods that pose a risk to the health and safety of Canadians by</p> <ul style="list-style-type: none"> <li>documenting the administration of relevant federal organization requirements;</li> <li>following the roles, responsibilities, policies, and procedures for administering pertinent federal organization requirements; and</li> <li>monitoring the administration of relevant federal organization requirements.</li> </ul>	<ul style="list-style-type: none"> <li><i>Canada Border Services Agency Act</i></li> <li><i>Customs Act</i></li> <li><i>Controlled Drugs and Substances Act</i></li> <li><i>Explosives Act</i></li> <li><i>Fertilizers Act</i></li> <li><i>Food and Drugs Act and Regulations</i></li> <li><i>Hazardous Products Act</i></li> <li><i>Motor Vehicle Safety Act</i></li> <li><i>Pest Control Products Act</i></li> <li>Policy on Management, Resources and Results Structures, Treasury Board, 2010</li> <li>Policy on Information Management, Treasury Board</li> </ul>
<p>The Canada Border Services Agency manages the Single Window Initiative consistent with IT project management best practices by</p> <ul style="list-style-type: none"> <li>establishing a governance and accountability structure,</li> <li>managing the project based on risk management principles,</li> <li>identifying key stakeholders and defining their needs,</li> <li>aligning the project with the business strategy of the Agency, and</li> <li>assessing its capacity to deliver on the project.</li> </ul>	<ul style="list-style-type: none"> <li>Policy on the Management of Projects, Treasury Board</li> <li>Policy on Information Management, Treasury Board</li> <li>Directive on Management of Information Technology, Treasury Board</li> <li>Standard for Organizational Project Management Capacity, Treasury Board</li> <li>Control Objectives for Information and Related Technology, IT Governance Institute</li> </ul>
<p>The federal organizations target and intercept consumer goods that pose a risk to the health and safety of Canadians by</p> <ul style="list-style-type: none"> <li>documenting how targeting activities are to be conducted;</li> <li>following the roles, responsibilities, policies, and procedures for targeting; and</li> <li>monitoring targeting activities and results.</li> </ul>	<ul style="list-style-type: none"> <li><i>Canada Border Services Agency Act</i></li> <li><i>Customs Act</i></li> <li>Framework for the Management of Risk, Treasury Board</li> <li>Policy on Management, Resources and Results Structures, Treasury Board, 2010</li> <li>Policy on Information Management, Treasury Board</li> </ul>

To determine whether the Canada Border Services Agency, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada control, at the border, selected commercially imported consumer goods that pose a risk to the health and safety of Canadians, we used the following criteria: (continued)

Criteria	Sources
<p>The federal organizations examine, at the border or through follow-up examinations, consumer goods that pose a risk to the health and safety of Canadians by</p> <ul style="list-style-type: none"> <li>documenting how examinations are to be conducted;</li> <li>following the roles, responsibilities, policies, and procedures for examinations; and</li> <li>monitoring examination activities and results.</li> </ul>	<ul style="list-style-type: none"> <li><i>Canada Border Services Agency Act</i></li> <li><i>Customs Act</i></li> <li><i>Controlled Drugs and Substances Act</i></li> <li><i>Explosives Act</i></li> <li><i>Fertilizers Act</i></li> <li><i>Food and Drugs Act</i></li> <li><i>Hazardous Products Act</i></li> <li><i>Motor Vehicle Safety Act</i></li> <li><i>Pest Control Products Act</i></li> <li>Framework for the Management of Risk, Treasury Board</li> <li>Policy on Management, Resources and Results Structures, Treasury Board, 2010</li> <li>Policy on Information Management, Treasury Board</li> </ul>

Management reviewed and accepted the suitability of the criteria used in the audit.

#### Period covered by the audit

The audit focused on the Canadian import control regime during the period November 2010 to September 2011. However, some documents reviewed go back to 2003. Audit work for this chapter was substantially completed on 30 September 2011.

#### Audit team

Assistant Auditor General: Wendy Loschiuk

Principal: Nicholas Swales

Director: Joanne Butler

Jared Albu

Bernard Battistin

Chantal Descarries

Eamonn Gaffney

Tammi Martel

Anthony Stock

Hugues-Albert Sully

Randolph Young

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).



## Appendix List of recommendations

The following is a list of recommendations found in Chapter 1. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<b>Administering import requirements</b>	
<p><b>1.21</b> To define and clarify roles, responsibilities, policies, and procedures for administering import requirements, the Canada Border Services Agency and Health Canada should prepare and finalize annexes for all programs identified in their 15 November 2011 umbrella memorandum of understanding. The Canada Border Services Agency should then document or update instructions to border services officers for these programs and products. (1.16–1.20)</p>	<p><b>The Agency's and the Department's response.</b> Agreed. The Agency and the Department will work together to complete annexes to the umbrella memorandum of understanding with related procedures that clearly define the roles and responsibilities of each organization for the border administration of the Department's import requirements. One to two annexes would be completed by March 2013, with all completed by March 2014.</p>
<p><b>1.29</b> The Canada Border Services Agency should ensure that the Process Monitoring Framework reporting includes enough information for the Agency to assess whether border controls are working as intended, share the results with relevant federal organizations, and act on the results. (1.25–1.28)</p>	<p><b>The Agency's response.</b> Agreed. The Agency will replace the Process Monitoring Framework with a new review structure. The new structure will streamline the Agency's review process by aligning the review criteria and strategy with high-risk areas of business and audit priorities that affect port of entry operations nationally. The new structure will also include a log that records when issues and results are communicated to relevant organizations to ensure that issues are addressed. The Agency will develop and implement the new review structure by July 2012.</p>

Recommendation	Response
<p><b>Targeting imported consumer goods</b></p> <p><b>1.43</b> The Canada Border Services Agency should implement a quality assurance process for its automated target monitoring reports, and develop a means to monitor and report on the effectiveness of border lookouts. (1.38–1.42)</p>	<p><b>The Agency's response.</b> Agreed. The Agency will implement an effective quality assurance and monitoring process that will ensure accurate and complete reporting of results of other federal organizations' targets and border lookouts on a timely basis. This will allow for timely sharing of information with relevant federal organizations about the effectiveness of the Agency's actions on their behalf. Given that this process must reflect the business processes being introduced with the Agency's implementation of a new targeting model, scheduled to begin on 1 April 2012, these measures will be completed by 30 June 2013.</p>
<p><b>Examining imported consumer goods</b></p> <p><b>1.53</b> The Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada should assess Canada Border Services Agency referrals systematically to determine whether responses are provided within agreed service standards and whether recommendations are followed. Each organization should use the results of this assessment to determine whether further action is required. (1.49–1.52)</p>	<p><b>The Canadian Food Inspection Agency's response.</b> Agreed. The Canadian Food Inspection Agency will conduct an assessment of its fertilizer referral process to the Canada Border Services Agency by Fall 2012 to determine if a formal monitoring program is required.</p> <p><b>Health Canada's response.</b> Agreed. Health Canada will develop service standards for each program as part of the development of program annexes with the Canada Border Services Agency (see response to recommendation 1.21). Health Canada also commits to monitoring i) compliance with agreed upon service standards, and ii) referrals from the Canada Border Services Agency in order to determine if the Agency is following Health Canada recommendations.</p> <p><b>Natural Resources Canada's response.</b> Agreed. For the Explosives Program, a new recording system was developed in October 2011 and is currently being implemented by NRCan officers located in Ottawa for all referrals coming from border services officers. This is also being communicated by the end of Quarter 1, 2012, to all NRCan officers who may be contacted by border services officers.</p> <p><b>Transport Canada's response.</b> Agreed. Transport Canada has consulted with the Canada Border Services Agency and has agreed to review the appropriateness of current service standards with respect to referrals and make changes as required to the Memorandum of Understanding between the two organizations.</p>

Recommendation	Response
	<p>The Department will also review the requirement to provide written confirmation regarding the status of vehicles within a one-hour time frame. This is expected to be completed by July 2012.</p> <p>Transport Canada and the Canada Border Services Agency have agreed that Transport Canada will create a tracking system to record referrals where Transport Canada, or its designated representative, has instructed the Canada Border Services Agency to deny entry of any goods referred. The system will record the Agency transaction number, the vehicle identification number(s), and the recommendation provided to the Agency. This system is expected to be in place by April 2012.</p> <p>Transport Canada will compare the referrals contained in the tracking system to those imported vehicles found to be inadmissible in any post-importation audit, and will forward these results to the Canada Border Services Agency quarterly for comment and resolution.</p>
















Spring 2012

**Report of the Auditor General of Canada  
to the House of Commons**

**Message from the Auditor General**

**Main Points—Chapters 1 to 5**

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-  Replacing Canada's Fighter Jets
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Spring 2012



## Report of the Auditor General of Canada to the House of Commons

### CHAPTER 2

#### Replacing Canada's Fighter Jets







Spring 2012



## **Report of the Auditor General of Canada to the House of Commons**

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### **CHAPTER 2**

#### **Replacing Canada's Fighter Jets**



Office of the Auditor General of Canada

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## **CHAPTER 2**

### **Replacing Canada's Fighter Jets**

## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance;
- gather the evidence necessary to assess performance against the criteria;
- report both positive and negative findings;
- conclude against the established audit objectives; and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.



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# Replacing Canada's Fighter Jets

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## Main Points

### What we examined

Canada currently operates a fleet of CF-18 Hornet fighter jets purchased in the 1980s with an original life expectancy until 2003, since extended to between 2017 and 2020 after a modernization program in early 2000. National Defence has determined that a suitable replacement for the CF-18 is required, or it will lose its ability to carry out domestic and international missions mandated by the Government of Canada.

National Defence has been a partner in the Joint Strike Fighter (JSF) Program since 1997. Led by the United States, and with eight other country partners, the Program is undertaking concurrent design, development, and manufacturing of the F-35 Lightning II aircraft. It will eventually include a regime for long-term collaborative sustainment. Canada's participation has been formalized by signing international memoranda of understanding—in 1997, 2002, and 2006—for each of the three major phases of the JSF Program. As of September 2011, the government had disbursed about CAN\$335 million toward participation in the JSF Program and related support to Canadian industry. The government has committed a total of US\$710 million to the Program.

In May 2008, through the *Canada First Defence Strategy*, the federal government announced its intent to replace the CF-18 fleet with 65 “next generation” fighter aircraft. Then, in July 2010, the government announced its decision to buy the F-35 Lightning II, without following a competitive process, as the CF-18 replacement.

We examined whether National Defence, Industry Canada, and Public Works and Government Services Canada exercised due diligence in managing Canada's participation in the JSF Program and in managing the federal decision-making process to acquire the F-35 as a replacement for the CF-18.

Our conclusions relate only to the management practices and actions of public servants. We did not audit private sector contractors and, consequently, our conclusions do not pertain to the contractor's practices or to their performance. We did not audit the merits of the F-35 aircraft.

Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Buying major defence equipment is subject to decision-making and project management processes whose aim is to ensure that decisions are well founded, projects are managed effectively, and goods and services are acquired in a way that enhances supplier access, competition, and fairness. National Defence, Industry Canada, Public Works and Government Services Canada (PWGSC), and central agencies are involved.

Buying and maintaining the F-35, or any other fighter jet, will require a significant long-term financial commitment. The F-35 is still being developed and tested, and projections of purchase price and sustainment costs are still being refined. Decisions taken to date as well as those yet to come will have impacts for the next 40 years.

### What we found

- National Defence took the appropriate steps in managing Canada's participation in the Joint Strike Fighter (JSF) Program to develop the F-35. National Defence engaged Industry Canada early, and together they managed industrial participation well. Early efforts to secure contract opportunities for Canadian companies were successful.
- There were significant weaknesses in the decision-making process used by National Defence in acquiring the F-35 to replace the CF-18. By the end of 2006, the Department was actively involved in developing the F-35, and a number of activities had put in motion its eventual procurement. In the lead-up to the government's 2010 announcement, required documents were prepared and key steps were taken out of sequence. Key decisions were made without required approvals or supporting documentation.
- PWGSC did not fully carry out its role as the government's procurement authority. Although it was not engaged by National Defence until late in the decision-making process, PWGSC endorsed the key decision to sole source the acquisition of the F-35 in the absence of required documentation and completed analyses. By that time, practically speaking, Canada was too involved with the aircraft and the JSF Program to run a fair competition.
- National Defence did not provide complete information in a timely manner. For example, briefing materials prepared for decision makers did not explain the basis for and limitations of projections of industrial benefits to Canadian companies, and the risks of relying on the projections for decision making. In addition, briefing materials



did not inform senior decision makers, central agencies, and the Minister of the problems and associated risks of relying on the F-35 to replace the CF-18. Nor did National Defence provide complete cost information to parliamentarians.

- National Defence likely underestimated the full life-cycle costs of the F-35. The budgets for the F-35 acquisition (CAN\$9 billion) and sustainment (CAN\$16 billion) were initially established in 2008 without the aid of complete cost and other information. Some of that information will not be available until years from now. If the budgets prove insufficient to cover total costs, the Department will have to find ways to cover additional costs that may be incurred. Alternatively, it may have to seek additional funds from the government or use funds from other parts of its capital or operating budgets.

**The departments have responded.** National Defence agrees with our recommendation. Its response follows the recommendation.

National Defence, Industry Canada, and Public Works and Government Services Canada have accepted the facts presented in the chapter. Both National Defence and Public Works and Government Services Canada disagree with the conclusions set out in paragraphs 2.80 and 2.81.



## Introduction



CF-18 Hornet

Photo: Department of National Defence



F-35 Lightning II

Photo: Lockheed Martin Aeronautics

**2.1** Canada purchased its current fleet of CF-18 Hornet fighter jets in the 1980s, with an original estimated life expectancy to 2003. A major modernization program carried out in the early 2000s extended the life of the aircraft until between 2017 and 2020. According to National Defence, when the CF-18 is retired at that time, unless there is a suitable replacement, Canada will lose its fighter jet capability and consequently its ability to carry out domestic and international missions mandated under the 2008 *Canada First Defence Strategy*.

**2.2** In July 2010, the Government of Canada announced its decision to buy 65 F-35 Lightning II jets to replace Canada's CF-18 fleet. The announcement was the culmination of nearly 13 years of Canada's participation in the United States-led Joint Strike Fighter Program. Buying and maintaining the F-35, or any other fighter jet, will require a significant long-term financial commitment. It will have far-reaching economic and operational impacts on Canadians and the Canadian Forces. Decisions taken to date as well as those yet to come will have impacts for the next 40 years.

### The United States-led Joint Strike Fighter Program

**2.3** The Joint Strike Fighter (JSF) Program started in the late 1990s. It is the United States Department of Defense's largest-ever development and procurement program, aiming to produce an affordable, multi-role aircraft able to perform in combat operations. The JSF Program is unique. Led by the United States, and with eight international partners (Australia, Canada, Denmark, Italy, Netherlands, Norway, Turkey, and United Kingdom), the JSF Program is undertaking concurrent design, development, and manufacturing of the F-35. It will eventually include a regime for long-term sustainment.

**2.4** Supporters of the F-35 expect it to be the most technologically advanced strike fighter jet in the world. Three variants of the aircraft will be produced:

- conventional takeoff and landing,
- carrier, and
- short takeoff/vertical landing.

**2.5** These variants are intended to replace existing fighter jets operated by the United States Air Force, Navy, and Marine Corps and other militaries around the world. Together, the nine partners are

**Sustainment**—Aircraft maintenance and repair, provision of spare parts, technological upgrades, training, and other operating activities.

anticipated to buy about 3,100 aircraft, with the United States acquiring 2,443. Canada plans to purchase 65 jets, of the conventional takeoff and landing variant.

**2.6** The JSF Program is divided into three major phases. At the beginning of each phase, country partners formalized their participation and financial contribution by signing a government-to-government memorandum of understanding (MOU). The following are the three phases:

- concept demonstration (1997 to 2001);
- system development and demonstration (2001 to 2018); and
- production, sustainment, and follow-on development (2006 to 2051).

**2.7** The JSF Program was conceived to be a new model for development and acquisition of military equipment. It has the following features, some of which are unique:

- **Industrial participation.** Companies from partner countries are eligible to participate in the manufacturing and sustainment over the lifetime of all jets produced. There is no guaranteed work for companies from partner countries.
- **Acquisition methods.** There are two ways to buy the F-35: through the third-phase 2006 MOU as a partner or through foreign military sales as a non-partner (at a higher price). In both cases, the purchase occurs through the US government. There is no contract directly between partner countries and the manufacturers. The 2006 MOU recognizes that procurement is subject to partners' national laws and policies.
- **Purchase costs.** The purchase price paid for the basic aircraft in any given year will be the same for all partners, including the US military. The purchase price does not include the substantial development costs incurred by the United States government. Partners will have to pay the cost of designing and manufacturing any requested modifications to their basic aircraft.
- **Input and access.** Partner countries have input on the design of the aircraft and the JSF Program through participation on decision-making and technical committees. Canada's contribution gives National Defence access to the newest technologies and some highly technical information granted only to partners.



- **Sustainment.** For maintenance and repair, provision of spare parts, technological upgrades, training, and other operating activities, partner countries and industry will be part of a global network. The sustainment strategy is still being developed.

**2.8** The Joint Strike Fighter Program Office plays a critical role in managing the JSF Program. It provides a forum for decision making, information sharing for all partners, information technology support, and management of the project on behalf of participants. National Defence has representatives on the JSF Program senior leadership, financial, and technical committees. Notwithstanding its international nature, the JSF Program is US-led and is subject to US law, rules, and Congressional oversight.

**2.9** The JSF Program has experienced cost increases, schedule delays, and technological problems. These issues are not uncommon for a major development program. As of April 2011, the US Government Accountability Office estimated total development funding to be US\$56.4 billion to complete the project by 2018, which is a 64 percent increase in estimated costs since the system development and demonstration phase started.

**2.10** The number of F-35 jets being produced and delivered is expected to increase over time. Initially, small numbers are being produced while the aircraft design is being tested and modified, and operational capabilities are added. These are referred to as **first operational aircraft**. Once the design is stable, and it has been demonstrated that the aircraft is capable of being deployed into a hostile situation, it will be subject to further operational testing and evaluation by US authorities. Once approved, the manufacturing process will enter its full-rate production. At the time of this audit, the aircraft was still in development and many technical challenges were yet to be overcome.

**2.11** The JSF program has been subject to several major technical, cost, and manufacturing reviews and has been significantly adjusted three times. Exhibit 2.1 shows changes in delivery schedule estimates of the F-35 conventional takeoff and landing variant, from the start of the system development and demonstration phase in October 2001 to April 2010. Exhibit 2.2 shows the increases in the estimated **unit recurring flyaway cost** for the conventional takeoff and landing variant over the full production period until 2035.

**First operational aircraft**—A production jet that does not contain specialized equipment required for operational testing. This is in contrast to a development jet that is equipped with specialized equipment to monitor the jet's performance during testing.

**Unit recurring flyaway cost**—The cost of an aircraft's airframe, vehicle and mission systems, and propulsion.

**2.12** In July 2010, US authorities began another comprehensive review of the JSF Program. This review is expected to affect the unit recurring flyaway cost, sustainment costs, as well as the development, production, and delivery schedule. At the time of this audit, partner countries were awaiting the outcome of this review. Exhibits 2.1 and 2.2 do not reflect the outcome of this review.

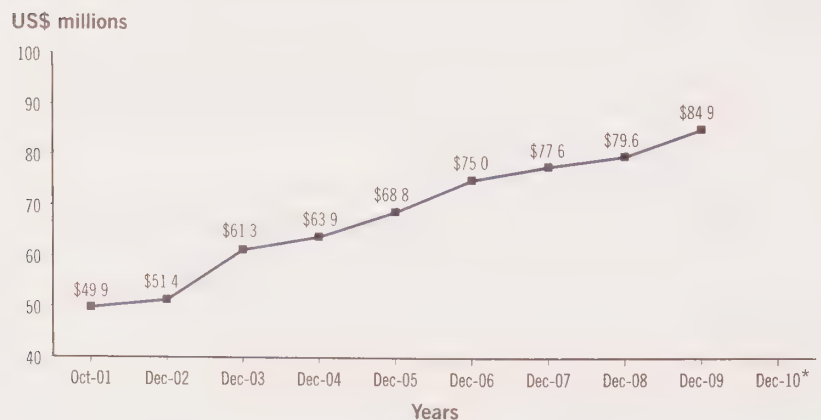
**Exhibit 2.1** There have been three changes from 2001 to 2010 in estimated delivery dates for the F-35 (conventional takeoff and landing variant)

	October 2001 (system development and demonstration phase starts)	December 2003 (first adjustment)	March 2007 (second adjustment)	April 2010 (third adjustment)
Estimated delivery dates				
First operational aircraft delivery	2008	2009	2010	2010
Full-rate production	2012	2013	2013	2016

This exhibit does not reflect the outcome of the United States (US) review of the Joint Strike Fighter Program.

Source: US Government Accountability Office (April 2011)

**Exhibit 2.2** Estimates for the full production period of unit recurring flyaway costs increased from 2001 to 2009



\* Figure is not available—awaiting outcome of the United States (US) review of the Joint Strike Fighter Program. Amounts are in US millions of “then year” dollars, the equivalent of Canadian budget-year dollars.

Unaudited figures

Source: Joint Strike Fighter Program Office

## Canada's fighter jet acquisition process

**2.13** The federal process to procure major defence equipment is governed by legislation, policy, and departmental guidance. Together, these specify the respective roles of federal departments and agencies, the key steps to be followed, the types of information and mandatory documents required, and the approvals that must be obtained as a procurement proceeds.

**2.14** In May 2008, the federal government released the *Canada First Defence Strategy*, which signalled its intent to replace the CF-18 fleet with 65 “next generation” fighter aircraft. In July 2010, the government announced its decision to buy 65 F-35 aircraft at a cost of CAN\$9 billion, without following a competitive process. National Defence expects the first aircraft to arrive in Canada in 2019.

## Focus of the audit

**2.15** This audit examined whether the three main departments involved in acquiring military equipment—National Defence, Industry Canada, and Public Works and Government Services Canada (the government's contracting authority)—applied due diligence in managing Canada's participation in the Joint Strike Fighter Program and managing the federal decision-making process to replace the CF-18 fighter jets. We define “due diligence” to mean that the departments have, in support of key decisions and related management activities,

- performed and documented analyses (of benefits and risks, operational requirements, options, and costs);
- clarified rules, roles, and responsibilities;
- consulted with other entities; and
- obtained approvals and provided oversight.

**2.16** Our criteria reflect basic principles of good management practices and due diligence, and are based on relevant Treasury Board policies that support decision making and sound stewardship, and that contribute to transparency, accountability, and value for money.

**2.17** More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations

**2.18** Our recommendation is in paragraph 2.77.

### Participating in the Joint Strike Fighter Program

**2.19** To date, Canada has been involved in the Joint Strike Fighter (JSF) Program for almost 15 years. Officials from National Defence have contributed to all three phases, including participating in its senior decision-making and technical committees. In addition, Industry Canada, together with National Defence, made efforts to ensure Canadian companies had (and continue to have) opportunities to bid on work in connection with the aircraft development as well as eventual production and sustainment. There is no single set of federal policies or rules that govern participation in an international initiative such as the JSF Program. Exhibit 2.3 provides a timeline of key events in the JSF Program and Canada's F-35 procurement process.

**2.20** National Defence signed the memorandum of understanding (MOU) for the first phase of the JSF Program, concept demonstration, in December 1997. Its US\$10.6 million (**budget-year dollars**) contribution was made within the expenditure authority of the Minister of National Defence and did not require approval by the Treasury Board. Faced with the eventual need to replace the CF-18 fighter jets, National Defence felt its participation provided the chance to work with allies in developing a new fighter jet as well as opportunities for Canadian companies to be part of the design and eventual production of an estimated 3,100 aircraft (if Canada decided to purchase the aircraft).

**2.21** In October 2001, the United States Department of Defense selected Lockheed Martin as the winner of a design competition held between two major industry consortia. National Defence signed the MOU for the second phase, system development and demonstration, in February 2002. In total, Canada committed to contributing US\$150 million (**budget-year dollars**) for this phase; Treasury Board approved US\$100 million in December 2001, which National Defence provided directly to the JSF Program. A further US\$50 million was distributed to Canadian industry through pre-existing Industry Canada programs that were mandated to provide funding support to strategic research and development projects. According to National Defence, securing industrial benefits for Canadian companies continued to be a driving motivation for participation.

**Budget-year dollars**—Costs in budget-year dollars reflect the purchasing power of the dollar in the year the cost is incurred. This is in contrast to costs in constant-year dollars, which reflect prior year, current, and future costs at the level of prices of a defined base year.



**2.22** In 2006, the JSF Program entered its third phase: production, sustainment, and follow-on development. This marked an important transition to a regime for producing, procuring, and maintaining the F-35. In our view, 2006 also represented the most critical period concerning Canada's participation in the JSF Program and future acquisition of the F-35.

**2.23** In November 2006, Industry Canada signed industrial participation memoranda of understanding with the JSF Program's prime contractors, the US-based companies that will manufacture the jets and engines: Lockheed Martin, Pratt & Whitney, and GE Rolls-Royce. These MOUs formalized a framework for offering opportunities to Canadian companies to be part of the supply chain to produce the jets and engines as subcontractors. Most importantly, National Defence signed the third-phase MOU in December 2006. This signing represented a significant financial commitment to the Program—up to US\$551 million over 40 years, provided Canada remains a partner—to be used for, among other things, manufacturing test and tooling equipment. It also represented Canada's acceptance of the procurement regime for the F-35. The Treasury Board approved a portion of Canada's contribution to the JSF Program (CAN\$182 million to 2013) in November 2006. It also approved CAN\$10 million to support National Defence's internal Program Office costs. As of September 2011, the government had disbursed a total of CAN\$335 million toward participation in the JSF Program and support to Canadian industry. National Defence plans to seek expenditure authority for the remainder of the contribution at a later date.

**2.24** According to National Defence, ongoing partnership in the JSF Program, and the eventual purchase of the F-35 through the provisions of the 2006 MOU, offered significant benefits. In addition to industrial benefits, these included

- unprecedented access to data about next generation fighter aircraft,
- cost avoidance (not having to pay for research and development costs or the fees associated with foreign military sales),
- savings on long-term sustainment costs through a collaborative approach with other partners,
- military “interoperability” (ability to work with allies and their equipment), and
- potential royalties on sales of the F-35 to non-partner countries.



Exhibit 2.3 Timeline of key events for the Joint Strike Fighter (JSF) Program and the F-35 procurement

## Canada—JSF Program and F-35 procurement

## United States (US) and international—JSF Program

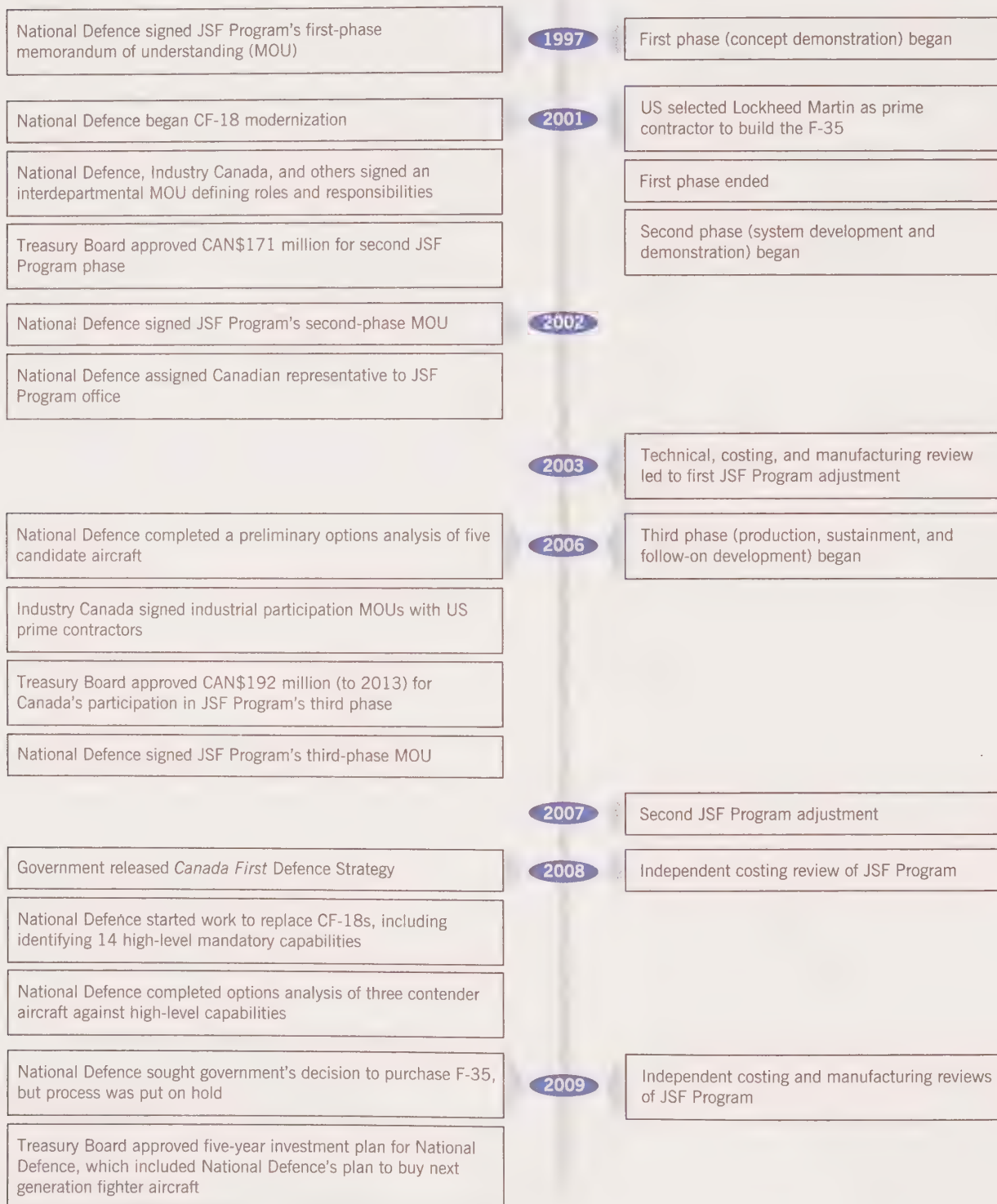
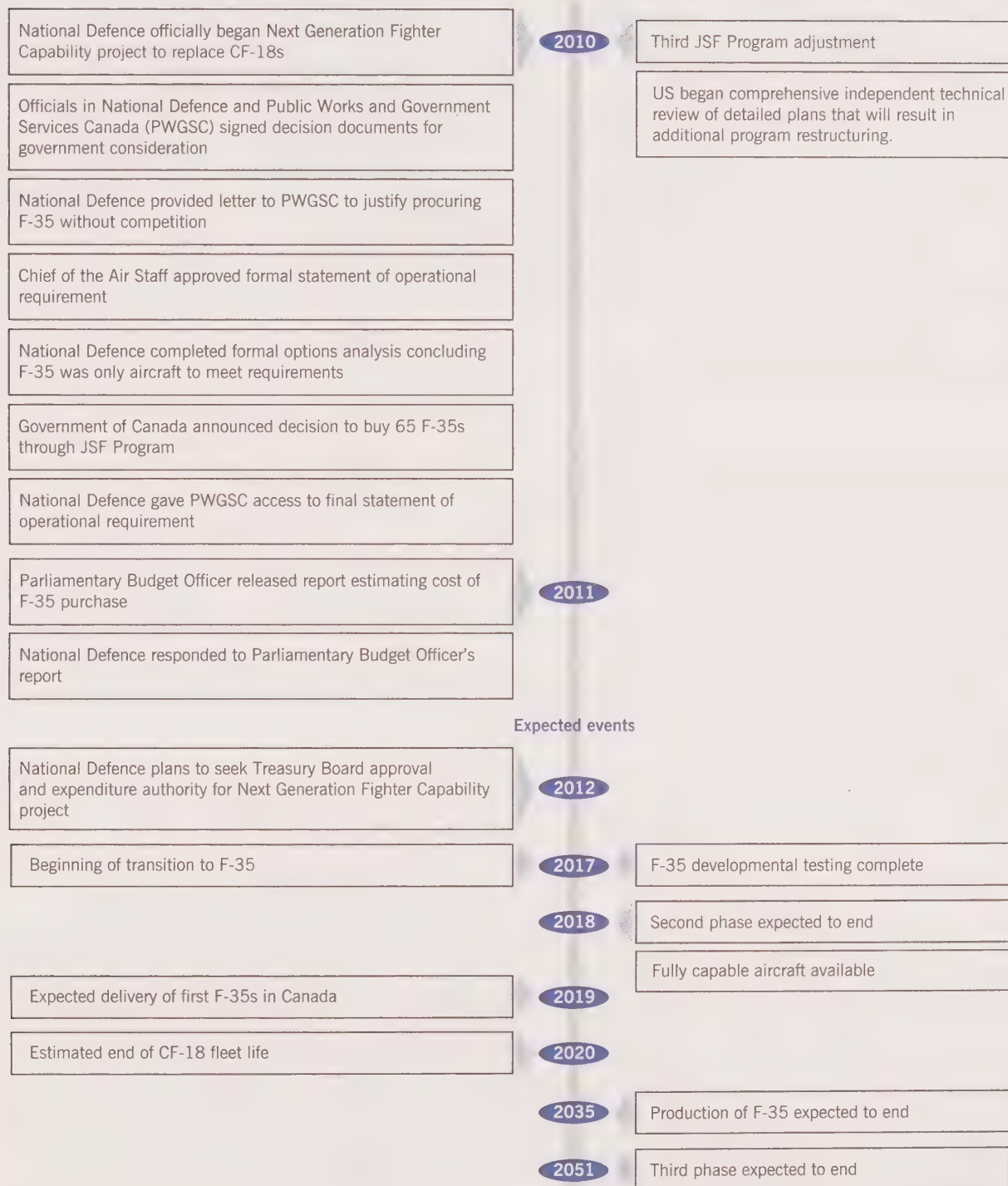


Exhibit 2.3 Timeline of key events for the Joint Strike Fighter (JSF) Program and the F-35 procurement (continued)

## Canada—JSF Program and F-35 procurement

## United States (US) and international—JSF Program



Source: Adapted from various National Defence, Industry Canada, Public Works and Government Services Canada, and JSF Program Office documents

**2.25** In determining whether the federal government applied due diligence with respect to Canada's participation in the JSF Program, we examined the extent to which key decisions, especially those taken in 2006, were supported by appropriate information and analyses, consultation, departmental oversight, and government approvals.

#### **Early efforts to promote industrial participation were successful**

**2.26** For most defence contracts signed by the Government of Canada, the government's Industrial Regional Benefits Policy applies. This policy seeks to ensure that defence purchases generate high-value business for Canadian industry and, in effect, guarantees work for Canadian companies, usually equivalent to the value of the acquisition contracts awarded.

**2.27** For the F-35, under the provisions of the JSF Program, partners cannot require prime contractors to provide work to companies in their countries. For Canada, this fact meant that the Industrial Regional Benefits Policy could not be applied. Industrial benefits were not guaranteed; rather, companies from partner countries were, and still are, eligible to obtain contracts, provided that the companies meet the "best value" criteria (including cost, schedule, and quality) and that the country buys the F-35 as a partner in the JSF Program.

**2.28** We examined how National Defence and Industry Canada carried out their respective activities and whether ministers and senior departmental decision makers were duly informed of the conditions on industrial participation established by the JSF Program.

**2.29** In 2000, National Defence gained Industry Canada's assistance in supporting the JSF Program, and together they approached the potential prime contractors to understand their requirements and to seek opportunities for Canadian industry. In early 2001, an interdepartmental JSF team was established to coordinate the federal promotion of economic opportunities for Canadian industry, trying to match Canadian capabilities with the needs of the prime contractors. A memorandum of understanding was signed by National Defence, Industry Canada, Foreign Affairs and International Trade Canada, and the Canadian Commercial Corporation; this memorandum defined roles and responsibilities for each organization in conducting outreach missions with US contractors.

**2.30** We found that the collaborative arrangement among federal departments was effective. We also found early efforts to secure industrial opportunities through the system development and demonstration phase were significant and the results were successful.

By 2006, National Defence estimated that Canadian companies had received 150 contracts valued at approximately CAN\$157 million. We also observed that, prior to signing the various MOUs in 2002 and 2006, the ministers of Industry Canada and National Defence, and senior decision makers in both departments, were informed that industrial benefits could not be guaranteed under the JSF Program.

### **Projections of industrial benefits fluctuated and uncertainties were not communicated**

**2.31** The forecasted value of industrial benefits is significant. It has been used extensively as a basis for key decisions related to Canada's participation in the JSF Program and the purchase of the F-35 as well as for communications to Canadians. Making forecasts is challenging and depends on, among other things, such factors as the total number of aircraft that will be produced eventually (which was unknown at the time of this audit) as well as the ability of Canadian companies to compete in a global market.

**2.32** We have two concerns regarding the forecasting of industrial benefits. First, there are significant fluctuations in the estimates of contract opportunities presented by National Defence and Industry Canada to senior decision makers and ministers (Exhibit 2.4). For example, prior to signing the 2002 MOU for system development and demonstration, National Defence estimated between CAN\$8 and 10 billion in projected benefits. In 2006, prior to signing the MOU for the production, sustainment, and follow-on development phase, National Defence communicated estimates to ministers that ranged from US\$5.2 to 14.7 billion. In 2009, it estimated these benefits to be as high as US\$16.6 billion; this estimate was reduced to US\$15.4 billion leading up to the government's 2010 decision to purchase the F-35 jets.

**Exhibit 2.4 Projected benefits (in \$billions) to Canadian industry, presented at key points to decision makers and ministers, have fluctuated widely**

Projected benefits for industrial participation	2001	2002	2006	2008	2009	2010
National Defence briefing documents	CAN\$8–10	CAN\$7	US\$5.2 US\$11 US\$14.7	US\$9	US\$15.4 US\$16.6	US\$12 US\$15.4
Industry Canada briefing documents	CAN\$8–10	–	US\$6	US\$10	–	US\$12

Source: National Defence and Industry Canada documents

Unaudited figures



**2.33** Second, we have concerns about the basis of the projections of industrial benefits for Canadian companies that National Defence and Industry Canada provided to ministers. Prior to 2006, National Defence took the lead in monitoring and forecasting industrial benefits, using a database that it designed and filled with data. In 2006, responsibility for monitoring and reporting was taken over by the prime contractors, in accordance with the industrial participation MOUs they signed with Industry Canada. Projections made by the prime contractors were (and continue to be) extrapolated over the entire production period, and were based on a combination of opportunities related to

- contracts that were already awarded in the system development and demonstration phase,
- potential contract opportunities that are offered exclusively to Canadian companies, and
- potential contract opportunities that are available through competition to companies from partner countries.

This third category represents the majority of the value of available opportunities, but these are the least certain, since Canadian companies must compete against companies from other partner countries.

**2.34** Since 2006, Industry Canada and National Defence used these projections as the basis of information provided to decision makers and ministers. These projections were not independently validated by federal departments, and in fact, this validation was difficult to do, since the data is largely proprietary. In 2010, the combination of estimated contract opportunities totalled US\$12 billion. National Defence added to these projections its own estimates of benefits that may accrue to Canadian companies as a result of assumed expenditures on local sustainment over 20 years. These estimates were based on assumptions about the type of work that may be performed in Canada and how much of it National Defence may direct to Canadian companies. These estimates are not related to the industrial participation opportunities provided by the prime contractors. In 2010, the benefits related to sustainment were estimated to be US\$3.4 billion.

**2.35** We found that briefing materials prepared by the departments for decision makers and ministers did not explain the basis for the projections, or the consequent limitations involved in relying on those projections for decision making. Moreover, in the majority of cases, only the most optimistic scenario was put forward, rather than a range of potential benefits that reflected the inherent uncertainties in the



projections. We are concerned, because these projections were used to support key decisions related to Canada's participation in the JSF Program and the purchase of the F-35 aircraft.

### **Preliminary analysis was conducted to consider various fighter jet options**

**2.36** The 2006 MOU for the third phase of the JSF Program (production, sustainment, and follow-on development) does not commit partner countries to purchase the F-35 aircraft. Nonetheless, in our view, sound management practices would have required that National Defence assure itself that the F-35 was a suitable, if not preferable, aircraft before further committing Canada and Canadian industry to the JSF Program. We therefore examined departmental activities in relation to identifying operational requirements and assessing how available options would meet those requirements.

**2.37** These activities took place in 2005, when National Defence began an analysis of potential aircraft to replace the CF-18s. It defined preliminary operational requirements for a replacement and assessed five candidate aircraft against them, based in part on information obtained from site visits to various aircraft manufacturers. Four of these candidates were existing aircraft; the fifth, the F-35, was still being developed. In June 2006, National Defence summarized this options analysis in the Operational Requirements Concept Document (ORCD). It concluded with a strong preference for the F-35, stating, "It is not only the aircraft that best meets Canadian Forces' requirements, with the longest life expectancy, but also is the most affordable."

**2.38** The ORCD did not assess the number of aircraft required to meet mission expectations and commitments. National Defence provided the JSF Program Office with an estimated procurement number of 80 aircraft, which was included in the 2006 MOU and was the basis for calculating Canada's financial contributions. This number of aircraft was an estimate based on the approximate number of modernized CF-18s existing at the time and was not based on an assessment of future operational needs.

**2.39** The ORCD conclusions were presented to senior officials within National Defence, including the Chief of the Air Staff and the Assistant Deputy Minister (Materiel). The conclusions were approved by the Chief of the Air Staff. These conclusions formed part of the basis upon which National Defence recommended to the Minister that the 2006 MOU be signed. In our opinion, this was an important activity that helped to support the government's decision to sign the MOU.

### **Risks associated with participating in the Joint Strike Fighter Program were communicated to decision makers**

**2.40** Treasury Board policies recognize that risk is an important element in decision making and needs to be identified, assessed, and communicated at key decision points. The policies also require measures to mitigate risks. We examined whether National Defence identified, assessed, and communicated risks related to Canada's participation in the JSF Program before seeking expenditure authority from the Treasury Board. The key decision points were when National Defence sought expenditure authority for Canada's financial contributions to the second and third phases of the JSF Program. We also examined the strategies that National Defence developed to mitigate identified risks.

**2.41** We found that National Defence identified and communicated risks and developed mitigation strategies for participating in the JSF Program. In 2001, prior to signing the MOU for the second phase of the JSF Program (system development and demonstration), risks such as the JSF Program being cancelled or running over budget were presented to senior decision makers in National Defence. The Department identified strategies to mitigate these risks, including imposing a ceiling for Canada's financial contributions and negotiating provisions in that MOU that would allow Canada to withdraw from the JSF Program. National Defence identified and communicated similar risks and risk mitigation strategies prior to signing the 2006 MOU for the production, sustainment, and follow-on development phase.

**2.42** However, there is no documentation indicating how the risks were determined and analyzed. Consequently, we have no basis to determine if the risk assessments are complete and appropriate under the circumstances.

### **There was a lack of consultation and communication on the procurement regime**

**2.43** The 2006 MOU for the third phase of the JSF Program (production, sustainment, and follow-on development) prescribes, for partners, the regime for procuring the F-35. This regime has implications for whether and how Public Works and Government Services Canada (PWGSC) carries out its role as the contracting authority for large defence procurements. Therefore, we believe National Defence should have engaged PWGSC and central agencies, before and after signing the 2006 MOU, to map out a strategy and process for obtaining government approvals and managing applicable procurement rules.

**2.44** This did not happen. While negotiating and finalizing the 2006 MOU, National Defence did not consult PWGSC to determine whether and how the procurement process outlined in the MOU mechanism could be managed in accordance with Canadian laws and policies. The reason is that National Defence did not consider this situation to be a procurement; rather, it was an initiative to gain industrial benefits and obtain technological transfer. PWGSC was not given a copy of the 2006 MOU until December 2009.

**2.45** We examined what ministers were told in briefing materials and submissions to government related to the decision whether to sign the 2006 MOU. We found that the ministers of National Defence and Industry Canada and those ministers on the Treasury Board were not fully informed in the materials about the procurement implications of the 2006 MOU. Briefing materials we have reviewed describe the features and benefits of Canada's participation in the JSF Program, with particular emphasis on industrial benefits. While ministers were told, correctly, that signing the 2006 MOU did not commit Canada to buy the F-35, we did not see evidence they were told that retaining industrial benefits depended on buying the F-35 as a partner in the JSF Program. Also, while ministers were told that the 2006 MOU did not prevent Canada from having a competition in the future, they were not told of the practical limitations of doing so. For example, as a partner in the development of the F-35, National Defence's long-standing relationship with and access to proprietary data from one of the prime contractors, coupled with the unique benefits offered only to partners, meant that other potential aircraft manufacturers would be disadvantaged from competing fairly.

**2.46** In summary, we found that National Defence, as the lead department, took the appropriate steps in managing Canada's participation in the Joint Strike Fighter (JSF) Program. The Department managed industrial participation well (together with Industry Canada), identified and communicated risks and mitigation strategies related to participating in the Program, and assessed options before signing the 2006 MOU. However, National Defence did not fully inform decision makers of the implications of participation in the JSF Program for the acquisition process. In some cases, documented analysis did not exist to support decisions.

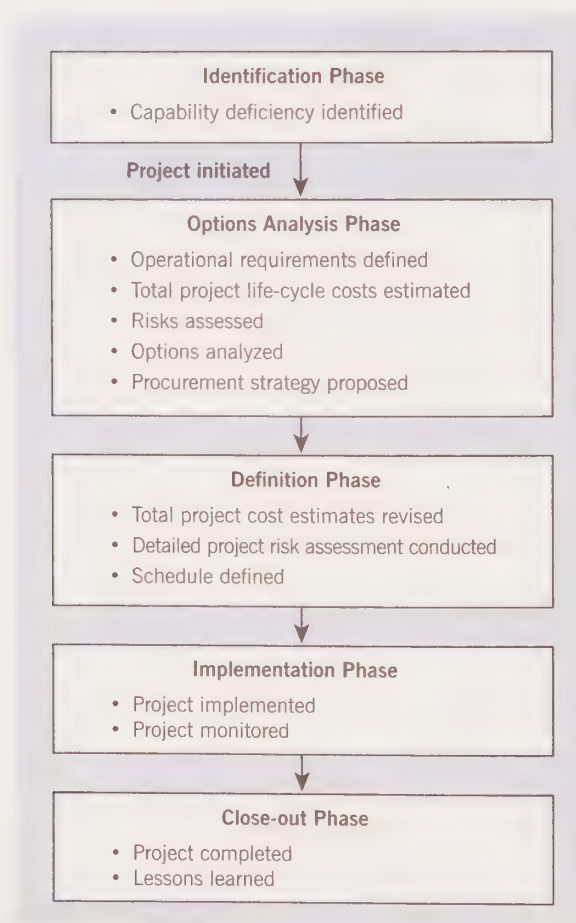
## Procuring new fighter jets

**2.47** As noted in the introduction, the federal process to procure defence equipment and to support decision making reflects legislation, policy, and departmental guidance. National Defence's formal project management process, in place during the period of this audit, is depicted in Exhibit 2.5. (This process was revised in September 2011.)

National Defence is responsible for leading project management activities. Public Works and Government Services Canada (PWGSC) plays a critical role in contracting activities. We examined whether the departments applied due diligence in managing the replacement of the CF-18 fighter jets, called the Next Generation Fighter Capability project.

**2.48** Within National Defence, a capital project officially starts after it is formally designated as such, at the end of the Project Identification Phase. For the fighter jets, this occurred in January 2010, when the Next Generation Fighter Capability project was approved internally and the formal Project Options Analysis Phase was started. That said, many of the types of activities required under the formal process—such as identifying operational requirements and analyzing options, assessing risks, and estimating costs—had already been under way for years.

**Exhibit 2.5 Key phases and steps in project management**



Source: Adapted from the project management process used within National Defence



At the end of the Project Options Analysis Phase, National Defence typically seeks formal project approval from the Treasury Board. At the time of this audit, National Defence expected to do so in 2012.

### **Key decision-making steps and documents were of little consequence**

**2.49** By the end of 2006, officials from National Defence and the Canadian Forces were actively involved in the development of the F-35. It was clearly the fighter jet of choice, and, in our view, a number of activities and decisions had put in motion its eventual procurement. By that time, National Defence had

- completed a preliminary options analysis of contender aircraft and concluded in favour of the F-35,
- signed three memoranda of understanding (MOUs) with its military allies,
- assigned personnel to work full-time in the Joint Strike Fighter (JSF) Program Office and participated in the decision-making structure,
- helped negotiate industrial participation memoranda with the F-35's prime contractors (which were signed by Industry Canada),
- successfully supported Canadian industry's involvement in the initial manufacturing (knowing that retaining industrial benefits was contingent on buying the aircraft), and
- committed about US\$710 million to the JSF Program (based on a projected purchase of 80 aircraft) and disbursed CAN\$176 million through contributions and support to industry.

**2.50** Despite the above, a decision by the Government of Canada to procure new fighter jets to replace the CF-18 was still required. This eventually happened in July 2010, when the government announced its decision to buy 65 F-35 aircraft. As described in the following paragraphs, we observed that in the lead-up to this announcement, required documents were prepared and key steps were taken out of sequence. Key decisions were made without required approvals or supporting documentation. We believe that National Defence ought to have treated procurement of the F-35 as a project in 2006, or shortly thereafter, and established an appropriate management plan. Doing this would have provided a framework for planning subsequent activities, supporting key decisions, and obtaining approvals in a timely manner.

**2.51** Government policy aims to ensure that goods and services are acquired in a manner that enhances access, competition, and fairness. It requires competition but permits a non-competitive (sole-source) purchase if one of four conditions exists, as set out in the



*Government Contracts Regulations*. An important step in the procurement process is the selection of a procurement strategy, essentially a decision whether to run a competition or not. The use of an exception to competition must be fully justified and is typically supported by a formal statement of operational requirement and options analysis. It is the responsibility of Public Works and Government Services Canada (PWGSC) to approve a procurement strategy and, more broadly, to uphold the integrity of the procurement process by ensuring that it adheres to all relevant legislation and policy. We examined how National Defence and PWGSC managed activities supporting the government's 2010 decision to buy the F-35.

**2.52** In May 2008, following the release of the *Canada First Defence Strategy*, National Defence identified 14 draft high-level mandatory capabilities for the replacement of the CF-18s. These were very broad and qualitative in nature and were a precursor to the formal statement of operational requirement. In 2008, two departmental boards—National Defence's **Capability Development Board** and the **Joint Capability Requirement Board**—endorsed these draft high-level mandatory capabilities.

**Capability Development Board**—A board that assists the Chief of Force Development in formulating decisions, direction, and guidance pertaining to central force development.

**Joint Capability Requirement Board**—A board that reviews and endorses technical and operational requirements of projects.

**2.53** Also in 2008, National Defence undertook an options analysis of three contender aircraft against the high-level mandatory capabilities. These included the F-35, which was still under development at the time. This analysis concluded that, while all three aircraft could meet the high-level mandatory capabilities, the F-35 offered the “best value” because it provided “exceptional capability at the lowest cost and unparalleled benefits for the Canadian aerospace industry.” This analysis became pivotal to the decision-making process. The conclusions were presented to senior decision makers. There was no documentation supporting the analysis and conclusions.

**2.54** Between late 2008 and mid-2009, National Defence led a process to get a government decision to buy the F-35, partly in response to pressure from industry to commit to buy the F-35 in order to keep and increase industrial benefits. Senior departmental decision makers and ministers were advised that a delay in this decision would lead to possible losses of billions of dollars in potential contracts for Canadian companies. Based on this, and on the conclusions of the 2008 options analysis, National Defence recommended to central agencies, other government departments, and its Minister that Canada commit to buying the F-35 through the provisions of the 2006 MOU for the third phase of the JSF Program, without competition. National Defence recognized at the time that holding a balanced competition among contender aircraft would be “exceedingly difficult,” in part

because of Canada's long-standing partnership in the development of the F-35. Ultimately, this decision process was put on hold, but for reasons unrelated to holding a competition.

**2.55** In early 2010, National Defence restarted the process to obtain a government decision to buy the F-35. By this time, the Next Generation Fighter Capability Project had officially started and the Project Options Analysis Phase (Exhibit 2.5) was under way. It was at this time that PWGSC became actively involved in the decision-making process.

**2.56** Since National Defence intended to recommend the purchase of the F-35 without competition, it had to identify and justify an appropriate exception to competitive tendering set out in the *Government Contracts Regulations*. One of the permitted exceptions is that “the nature of the work is such that it would not be in the public interest to solicit bids.” Up until late May 2010, National Defence planned to use this exception, based in part on the conclusions from the 2008 options analysis and on its argument that it needed a fighter jet with **fifth generation capability**. While this exception was supported by PWGSC, ultimately the use of this exception was not supported inter-departmentally. National Defence then decided to use another of the permitted exceptions, that “only one person [that is, contractor(s)] is capable of performing the contract,” and the decision-making documents were reworded accordingly.

**2.57** To support the use of this exception, National Defence was required to identify its operational requirements and to provide a full justification to PWGSC. Neither was provided to PWGSC in a timely manner, despite several requests from PWGSC. PWGSC was not given a copy of the statement of operational requirement until August 2010, well after the government had announced its decision to purchase the F-35 in July 2010. In fact, the statement was approved by the Chief of the Air Staff after decision-making documents related to the government's July 2010 announcement had been signed and submitted for consideration by ministers. Then, according to National Defence, the formal options analysis was completed (as required as part of the Project Options Analysis Phase as shown in Exhibit 2.5), which concluded that the F-35 was the only available aircraft that could meet the mandatory requirements of the Canadian Forces. The conclusion was cited as the basis for the government's decision to purchase the F-35 without competition.

**2.58** While decision-making documents were being finalized in late May 2010, PWGSC questioned National Defence's assertion that no other aircraft met its mandatory requirements. Senior decision makers

**Fifth generation capability**—Fighter jets that, according to manufacturers, incorporate the most modern technologies, such as stealth, advanced radar, and integrated avionics. There is no accepted or objective definition of fifth generation capability.

in PWGSC were informed that PWGSC had not been provided sufficient justification to support National Defence's proposed procurement strategy and assertion that only one company was capable of performing the contract. In lieu of a finalized statement of operational requirement or a completed options analysis, PWGSC informed National Defence on 1 June 2010 that it would endorse the sole-source justification if National Defence provided a letter confirming National Defence's requirement for a fifth generation fighter and confirming that the F-35 is the only such aircraft available. The same day, National Defence provided such a letter. There were no other supporting documents. By this time, decision-making documents had already been signed in both National Defence and PWGSC. It is important to note that the term "fifth generation" is not a description of an operational requirement.

**2.59** We found that National Defence engaged PWGSC late in the decision-making process and hampered PWGSC's ability to carry out its responsibilities as contracting authority to ensure the integrity of the procurement process. At the same time, PWGSC relied almost exclusively on assertions by National Defence and endorsed the procurement strategy in the absence of required documentation and completed analysis. We believe this has compromised an important control in the procurement process: independent validation of a proposed procurement strategy.

**2.60** In our view, many of the steps and documents used to support the government's 2010 decision were of little consequence, because the key questions of whether to procure the F-35 and whether to run a competition were effectively determined by decisions taken much earlier, calling into question the integrity of the process. Not only were they of little consequence, they might also have been unnecessary if National Defence had sought government approval at an earlier stage to be completely exempt from the requirement to fit the procurement into one of the specified exceptions to competitive tendering. Practically speaking, by 2010, Canada was too involved in the JSF Program and the F-35 to run a fair competition.

### **Risks and mitigating strategy did not reflect cost increases and delays**

**2.61** Treasury Board policies require risks to be identified and communicated to decision makers at key decision points and to be reassessed periodically throughout the life of the project. Our earlier findings focused on risks associated with Canada's participation in the JSF Program. This section addresses how National Defence identified and communicated the risks associated with Canada's reliance on the JSF Program and the F-35 to replace the CF-18. Such risks relate to

potential schedule slippage, cost increases, and technical challenges that may affect fulfillment of the mandatory operational requirements. We reviewed the briefing materials that were provided to various senior departmental committees and the Minister of National Defence between 2006 and 2010. We also examined the strategies developed to mitigate identified risks. It is important to note that the management of cost, schedule, and technical risks associated with the development and production of the F-35 is the responsibility of the US government. National Defence relies on the JSF Program Office to obtain information about such risks.

**2.62** We have concerns with the manner in which National Defence identified and communicated risks. As noted in the introduction to this chapter, the JSF Program has experienced cost increases, schedule delays, and technological difficulties, and has been subject to several major reviews. Officials from National Defence who participated in the senior decision-making committees of the JSF Program were regularly informed of these problems. Yet in briefing materials from 2006 through 2010 that we have reviewed, neither the Minister nor decision makers in National Defence and central agencies were kept informed of these problems and the associated risks of relying on the F-35 to replace the CF-18. In 2009, in presentations to central agencies and the interdepartmental community, National Defence identified the risk of potential cost increases but asserted that costs had stabilized and that all major outstanding cost issues had been resolved. In 2010, when the JSF Program was undergoing a comprehensive review of cost, schedule, and technology development due to ongoing problems, neither the **Senior Review Board** nor the Minister was informed of these problems in briefing materials. According to National Defence, until 2010, when the decision was made to procure the F-35, none of the cost, schedule, or technical risks associated with the JSF Program involved a significant impact to Canada.

**Senior Review Board**—A board that is established for each large project to provide rigorous examination of and challenge to a project as well as ongoing review and oversight.

**2.63** When communicating risk information to departmental decision makers, National Defence provided an overall risk rating for replacing the CF-18 with the F-35. The Senior Review Board assessed this rating as “medium” prior to the July 2010 announcement. This rating is lower than previous ratings provided to decision makers in 2008 and was, in our opinion, inconsistent with the problems the JSF Program was experiencing at the time. There was no documented analysis to determine how the risks were assessed and rated.

**2.64** With respect to mitigating risks associated with potential cost increases, schedule delays, and technical challenges, since 2006, National Defence has consistently taken the position that it would



make its purchase at the ideal time of the production cycle. That is, it would do so when economies of scale are at their highest, prices are at their lowest, and all technical difficulties have been resolved. This mitigation strategy has not changed since 2006, despite the fact that the system development and demonstration phase was extended to 2018 and full-rate production is now expected to start in 2018. In February 2010, National Defence received formal communication from the US Under Secretary of Defense for Acquisition, Technology and Logistics that developing the F-35 would cost more and take longer to finish than planned and that the US Department of Defense was reassessing its cost projections.

**2.65** In our opinion, National Defence has been overly confident about potential mitigation strategies, especially given that the F-35 is still under development and that the CF-18 is expected to reach the end of its life between 2017 and 2020. The transition to the F-35 is expected to start in 2017 and be completed in 2020, at which time the CF-18 fleet would be retired and no longer supported.

#### **Full life-cycle costs were not presented and were likely underestimated**

**2.66** Treasury Board policies require consideration of all relevant costs over the useful life of equipment, not just the initial acquisition or basic contract cost. Careful planning and full costing are needed to ensure that all of the elements required to provide the needed capability come together in a timely and predictable way and that adequate funds are available to support the equipment over the long term. We examined whether National Defence conducted full life-cycle costing related to its Next Generation Fighter Capability project and whether cost estimates were complete, supported, and validated, using the best information available at the time. Estimating future full life-cycle costs for military equipment, especially the F-35, is challenging.

**2.67** To determine the unit price of the F-35, Canada relies in part on data generated by the US government. A Selected Acquisition Report is presented annually to the US Congress. Once approved, the JSF Program Office produces for Canada a “bilateral cost breakdown.” This breakdown contains the predicted unit recurring flyaway cost, based on the number of aircraft Canada plans to purchase and when it plans to do so. Based on the 2009 bilateral cost breakdown, the predicted average unit recurring flyaway cost for Canada, for 80 conventional takeoff and landing variant aircraft, was US\$75 million. To this cost, National Defence must add the predicted cost of Canadian modifications to the basic variant, which include



adding drag chutes for landing on short runways and adding a different system for refuelling in the air. The JSF Program Office also provides National Defence with the predicted sustainment cost of the F-35 conventional takeoff and landing variant. National Defence reviews the cost breakdown for consistency with its planning assumptions. Following the government's 2010 announcement, National Defence informed the US Joint Strike Fighter Program Office of its plan to reduce the purchase to 65 aircraft.

**2.68** Exhibit 2.6 illustrates two cost estimates developed by National Defence: the first was used for decision making in June 2010; the second was presented to Parliament in response to the March 2011 report of the Parliamentary Budget Officer. It is important to note that some of these costs are specific to the F-35 (such as capital acquisition and sustainment), whereas other costs are more broadly associated with fighter jet capability (such as personnel).

**Exhibit 2.6** National Defence's estimated 20-year costs for the F-35 have varied

	Elements related to the purchase of the F-35 (in millions of Canadian budget-year dollars)	National Defence's estimates used for decision making June 2010	National Defence's public response to Parliamentary Budget Officer's report March 2011
<b>Capital acquisition costs—aircraft</b>	Aircraft	5,580	—
	Canadian modifications	420	—
	<b>Total capital costs for 65 F-35s</b>	<b>6,000</b>	<b>6,000</b>
<b>Additional capital acquisition costs</b>	Initial logistics and training (including simulators)	1,320	1,300
	Project management (initial)	160	200
	Weapons (initial buy)	270	300
	Infrastructure	400	400
	Contingency, inflation	830	800
	<b>Total additional capital acquisition costs</b>	<b>2,980</b>	<b>3,000</b>
	<b>Total capital acquisition costs</b>	<b>8,980</b>	<b>9,000</b>
<b>Personnel, operating, and maintenance costs</b>	Contracted sustainment	5,710	5,700
	Contingency	860	—
	Operating costs	4,830	—
	National Defence personnel	4,740	—
	<b>Total personnel, operating, and maintenance costs</b>	<b>16,140</b>	<b>5,700</b>
	<b>Total 20-year costs</b>	<b>25,120</b>	<b>14,700</b>

Source: National Defence  
Unaudited figures

**2.69** To date, there have been two key announcements regarding the budget for replacing the CF-18s: the May 2008 *Canada First Defence Strategy* and the July 2010 announcement of the F-35 purchase. The *Canada First Defence Strategy* established a budget of CAN\$9 billion to acquire 65 next generation fighter aircraft. This budget figure was subsequently included in National Defence's 2009 Investment Plan. It was also carried forward into decision documents to support the July 2010 announcement. Also in 2008, a budget of CAN\$16 billion was established to operate and sustain the F-35 over 20 years. These budgets were based on estimates provided by National Defence, yet there is no documented analysis to show how they were developed. In 2010, National Defence informed decision makers that the costs of operating and sustaining the F-35 would be covered by existing funds.

**2.70** These budgets have since been treated as a maximum by National Defence, yet many decisions that could affect the ultimate costs are still to be taken. Moreover, as noted in paragraphs 2.11 and 2.12, United States' estimates of the future purchase price of the F-35 are in flux. Estimates for sustainment costs are not fully developed. Although the budgets established for the acquisition (CAN\$9 billion) and for operations and sustainment (CAN\$16 billion) include provision for contingency, there is a risk that these budgets may not be sufficient.

**2.71** We have a number of observations regarding the life-cycle costing for the F-35. First, costs have not been fully presented in relation to the life of the aircraft. The estimated life expectancy of the F-35 is about 8,000 flying hours, or about 36 years based on predicted usage. National Defence plans to operate the fleet for at least that long. It is able to estimate costs over 36 years. We recognize that long-term estimates are highly sensitive to assumptions about future costs as well as to currency exchange rates. However, in presenting costs to government decision makers and to Parliament, National Defence estimated life-cycle costs over 20 years. This practice understates operating, personnel, and sustainment costs, as well as some capital costs, because the time period is shorter than the aircraft's estimated life expectancy. The JSF Program Office provided National Defence with projected sustainment costs over 36 years.

**2.72** Second, the following expected costs were not accounted for:

- **Replacement aircraft.** National Defence considers 65 aircraft the minimum number needed to meet its training and operational requirements. Based on past experience, National Defence expects to lose aircraft in the course of normal usage. Based on

National Defence's assumed attrition rate, in order to maintain the fleet of 65 aircraft, Canada may need to purchase up to 14 additional aircraft over the next 36 years. National Defence did inform the government of the need to consider the requirement for attrition aircraft at a later date. The cost of replacement aircraft is not included in the life-cycle estimate for this project and will be treated as a separate project in the future.

- **Upgrades.** It is expected that over the life of the aircraft, Canada will need to invest in various upgrades to the F-35 fleet, both in software and hardware. These costs were not known when the 2008 and 2010 budgets were established, but have since been estimated to be more than CAN\$1.2 billion over 20 years.
- **Weapons.** National Defence has currently allocated enough weapons for an initial stockpile to last for 45 days of conflict operations. National Defence assumes that it will use existing weapons from the CF-18s to fulfill some of its needs. It will absorb future weapons purchases from its operating budget, and the purchase of new weapons during the fleet's life cycle will be addressed through future acquisition projects.

**2.73** Third, many costs are not yet reliably known or cannot yet be estimated. These include the basic unit recurring flyaway cost of the aircraft, the cost of Canadian required modifications, and the cost of sustainment. In addition, National Defence is still developing its planning assumptions for operating the fleet. This involves hundreds of interrelated decisions about such matters as how pilot and technician training will be delivered, what physical infrastructure is required and what portion is directly attributable to the F-35, how maintenance and repair activities will be supported, and what they will cost. National Defence currently assumes that average annual maintenance and repair costs for the F-35 fleet will be the same as for the CF-18 fleet. At the time of this audit, the project had not yet entered the formal Project Definition Phase, when many of these decisions will be taken and the cost implications will be better known. Consequently, estimates of the full life-cycle costs for the F-35 will likely change as the basis for the estimates becomes firmer.

**2.74** Also unknown are the cost implications if further delays in the delivery of the F-35 require National Defence to make significant investments to extend the operation and life of the CF-18 fleet.

**2.75** We believe that establishing a budgetary cap without the aid of more complete and reliable cost estimates creates significant risks. National Defence may have to abandon or reduce some of the

Canadian Force's capabilities, for example, by reducing the number of aircraft purchased or their flying hours. Alternatively, it may need to seek additional funds from the government or use funds from other parts of its capital or operating budgets. This could make it difficult to determine the complete life-cycle costs associated with the F-35 fighter jet capability.

**2.76** We also have significant concerns about the completeness of cost information provided to parliamentarians. In March 2011, National Defence responded publicly to the Parliamentary Budget Officer's report. This response did not include estimated operating, personnel, or ongoing training costs (Exhibit 2.6). Also, we observed that National Defence told parliamentarians that cost data provided by US authorities had been validated by US experts and partner countries, which was not accurate at the time. At the time of its response, National Defence knew the costs were likely to increase but did not so inform parliamentarians.

## Recommendation

**2.77 Recommendation.** National Defence should refine its estimates for complete costs related to the full life cycle of the F-35 capability, and provide complete estimated costs and the supporting assumptions as soon as possible. Furthermore, National Defence should regularly provide the actual complete costs incurred throughout the full life cycle of the F-35 capability.

**The Department's response.** Agreed. National Defence will continue to refine its full life-cycle cost estimates for the F-35 capability and commits to making the estimates and actual costs of the F-35 available to the public.

## Conclusion

**2.78** The Joint Strike Fighter (JSF) Program is unique. In this context, National Defence, as the lead department, exercised due diligence in managing Canada's participation in the Program. National Defence managed industrial participation well (together with Industry Canada), identified and communicated risks and mitigation strategies related to JSF Program participation, and assessed options before signing the 2006 memorandum of understanding (MOU), committing Canada to the third phase of the JSF Program (production, sustainment, and follow-on development.) However, National Defence did not fully



inform decision makers of the implications of participation in the JSF Program for the acquisition process. In some cases, documented analysis did not exist to support decisions.

**2.79** Industry Canada exercised due diligence in managing Canada's industrial participation in the JSF Program. In partnership with National Defence, Industry Canada worked to secure industrial participation.

**2.80** National Defence did not exercise due diligence in managing the process to replace the CF-18 jets. National Defence did not appropriately consult Public Works and Government Services Canada (PWGSC) on the procurement implications of the 2006 MOU for the third phase of the JSF Program or develop an appropriate plan for managing the unique aspects of the acquisition. Problems relating to development of the F-35 were not fully communicated to decision makers, and risks presented to decision makers did not reflect the problems the JSF Program was experiencing at the time. Full life-cycle costs were understated in the estimates provided to support the government's 2010 decision to buy the F-35. Some costs were not fully provided to parliamentarians. There was a lack of timely and complete documentation to support the procurement strategy decision.

**2.81** PWGSC did not demonstrate due diligence in its role as the government's procurement authority. Although it was not engaged by National Defence until late in the decision-making process, PWGSC relied almost exclusively on assertions by National Defence and endorsed the sole-source procurement strategy in the absence of required documentation and completed analysis.

**2.82** Both National Defence and Public Works and Government Services Canada disagree with our conclusion that they did not demonstrate due diligence in their respective roles in the replacement of the CF-18 jets. The departments believe that the level of due diligence was appropriate within the time frame covered by this audit.

**2.83** Procuring developmental equipment can bring unique risks and challenges. In our opinion, the experience with the acquisition of the F-35 has potential lessons for development and acquisition of other military equipment. In this context, while National Defence did several things well, we have described several concerns in the chapter. We do not believe a recommendation based on these concerns is required, given that best practices and policies governing these areas are sufficient.

## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

### Objectives

The audit objectives were to determine whether

- National Defence and Industry Canada applied due diligence in managing Canada's participation in the United States (US)-led Joint Strike Fighter (JSF) Program, and
- National Defence and Public Works and Government Services Canada (PWGSC) applied due diligence in managing the Canadian Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets.

### Scope and approach

The audit was divided into three lines of enquiry: one for National Defence and one for Industry Canada on Canada's participation in the US-led JSF Program; and the third line of enquiry for National Defence's and PWGSC's management of the Canadian Next Generation Fighter Capability project. Each line of enquiry examined the extent to which the departments applied due diligence in managing their respective responsibilities. For National Defence, these responsibilities relate largely to the JSF Program and project management, and for Industry Canada, to industrial participation. We also examined the role of PWGSC in relation to its responsibilities for procurement.

In addition to our audit examination work, we obtained background information to better understand the history of the JSF Program and to provide context for Canada's participation in it.

The audit examined documents and correspondence contained in National Defence's program, project, and payment files; Industry Canada's industrial participation and contribution files; and PWGSC's procurement files. We conducted interviews with individuals who are currently or were formerly involved in the management of the JSF Program. We interviewed officials of the JSF Program Office, the Cost Assessment and Program Evaluation directorate at the US Department of Defense, the US Government Accountability Office, and Lockheed Martin. We visited the Canadian Forces' Wing in Cold Lake, Alberta, one location of the CF-18 fleet.

We have chosen the phrase "applied due diligence" to describe our expectation and have drawn on a number of sources (acts and regulations and departmental policies and guides) that address requirements for effective decision making, sound stewardship, and value for money.

We did not examine certain decisions that were made, because they are policy or are beyond our technical capability. We did not audit the merits of the F-35 aircraft.

We also did not audit the JSF Program or the activities of the international partners.

It should be noted that our conclusions about management practices and actions apply only to those of public servants in the federal government. The rules and regulations we refer to apply to public servants; they do not apply to contractors. We did not audit the records of the private sector contractors. Consequently, our conclusions cannot and do not pertain to the contractors' practices or their performance.

## Criteria

Our criteria reflect basic principles of good management practices and due diligence, and are based on relevant Treasury Board policies that support decision making and sound stewardship and contribute to transparency, accountability, and value for money.

To determine whether National Defence and Industry Canada applied due diligence in managing Canada's participation in the United States-led Joint Strike Fighter Program and whether National Defence and Public Works and Government Services Canada applied due diligence in managing the Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets, we used the following criteria:

Criteria	Sources
National Defence has identified, assessed, and managed risks to support the decision making related to the Canadian participation in the Joint Strike Fighter (JSF) Program. (Sources: 10, 16, 17, 23)	1. <i>National Defence Act</i> 2. <i>Defence Production Act</i> 3. <i>Department of Industry Act</i>
National Defence has a governance and management approach to carry out its activities, within its mandate and authorities, and applied it to the Canadian participation in the JSF Program. (Sources: 1, 2, 3, 4, 5, 10, 13, 15, 16, 18, 19, 21, 24, 25)	4. <i>Financial Administration Act</i> 5. <i>Department of Public Works and Government Services Act</i> 6. <i>Government Contracts Regulations</i>
National Defence has carried out and sought appropriate oversight and approvals at key decision points related to the Canadian participation in the JSF Program. (Sources: 4, 10, 13, 18, 24, 25)	7. Contracting Policy, Treasury Board 8. Procurement Review Policy, Treasury Board 9. Policy on the Management of Projects, Treasury Board
National Defence knows its contributions are being used for the purposes intended, in accordance with the terms and conditions of the 2002 system development and demonstration memorandum of understanding and the 2006 production, sustainment, and follow-on development memorandum of understanding. (Sources: 4, 10, 14, 15)	10. Policy on Internal Control, Treasury Board 11. Policy on Transfer Payments, Treasury Board, 2008 12. Policy on Investment Planning—Assets and Acquired Services, Treasury Board
Industry Canada has identified, assessed, and managed risks and benefits related to the Canadian industrial participation in the JSF Program. (Sources: 8, 10, 16, 17, 19)	13. Policy on Financial Management Governance, Treasury Board, 2009 14. Account Verification Policy, Treasury Board, 1994
Industry Canada has a governance and management approach to carry out its activities, within its mandate and authorities, and applied it to the Canadian industrial participation in the JSF Program. (Sources: 3, 10, 11, 13, 15, 18)	15. Policy Framework for Financial Management, Treasury Board, 2010 16. Policy Framework for the Management of Assets and Acquired Services, Treasury Board, 2006
Industry Canada has carried out and sought appropriate oversight and approvals at key decision points related to the Canadian industrial participation in the JSF Program. (Sources: 10, 11, 13)	17. Framework for the Management of Risk, Treasury Board, 2010 18. Guide to Preparing Treasury Board Submissions, Treasury Board, 2007

To determine whether National Defence and Industry Canada applied due diligence in managing Canada's participation in the United States-led Joint Strike Fighter Program and whether National Defence and Public Works and Government Services Canada applied due diligence in managing the Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets, we used the following criteria: (continued)

Criteria	Sources
Industry Canada knows that it has met its contribution commitments in accordance with the terms and conditions of the 2002 system development and demonstration memorandum of understanding and the 2006 production, sustainment, and follow-on development memorandum of understanding. (Sources: 3, 10, 11, 15, 18)	19. Guide to Costing, Treasury Board, 2008 20. Standard for Project Complexity and Risk, Treasury Board 21. Project Management Principles and Policies, National Defence
National Defence and Public Works and Government Services Canada have identified, assessed, and managed key activities of project management to support the decision making related to the Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets. (Sources: 2, 5, 6, 7, 8, 9, 10, 12, 13, 17, 19, 20, 23, 24)	22. Supply Manual, Public Works and Government Services Canada 23. Procurement Administration Manual, National Defence, 2007 24. Project Approval Guide, National Defence, 1998
National Defence has a governance and management approach to carry out its activities, within its mandate and authorities, and applied it to the Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets. (Sources: 1, 3, 9, 10, 12, 13, 15, 16, 18, 19, 21)	25. Directive 7014 on Memoranda of Understanding, National Defence, 1998
National Defence and Public Works and Government Services Canada have carried out and sought appropriate oversight and approvals at key decision points related to the Next Generation Fighter Capability project for the replacement of the CF-18 fighter jets. (Sources: 8, 10, 13, 24)	

Management reviewed and accepted the suitability of the criteria used in the audit.

### Period covered by the audit

Although Canada's participation in the United States-led Joint Strike Fighter Program began in 1997, the activities we audited occurred between January 2001 and July 2010.

Audit work for this chapter was substantially completed on 30 September 2011.

### Audit team

Assistant Auditor General: Jerome Berthelette

Principal: John Reed

Director: Joyce Ku

Marie-Josée Bouffard

Eve-Lyne Bouthillette

Jolanta Hausner

Robyn Meikle

Stephanie Taylor

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).



## Appendix Recommendation

The following recommendation is found in Chapter 2. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<p><b>Procuring new fighter jets</b></p> <p><b>2.77</b> National Defence should refine its estimates for complete costs related to the full life cycle of the F-35 capability, and provide complete estimated costs and the supporting assumptions as soon as possible. Furthermore, National Defence should regularly provide the actual complete costs incurred throughout the full life cycle of the F-35 capability. (2.47–2.76)</p>	<p>Agreed. National Defence will continue to refine its full life-cycle cost estimates for the F-35 capability and commits to making the estimates and actual costs of the F-35 available to the public.</p>











Spring 2012

**Report of the Auditor General of Canada  
to the House of Commons**

**Message from the Auditor General  
Main Points—Chapters 1 to 5  
Appendix**

**CHAPTER 1**

Border Controls on Commercial Imports

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**APPENDIX**

Special Examinations of Crown Corporations—2011

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Government  
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Spring 2012



## Report of the Auditor General of Canada to the House of Commons

### CHAPTER 3

#### Interest-Bearing Debt



Office of the Auditor General of Canada



Spring 2012



## Report of the Auditor General of Canada to the House of Commons

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### CHAPTER 3

#### Interest-Bearing Debt



Office of the Auditor General of Canada

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Distribution Centre  
240 Sparks Street  
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## **CHAPTER 3**

### **Interest-Bearing Debt**

## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance;
- gather the evidence necessary to assess performance against the criteria;
- report both positive and negative findings;
- conclude against the established audit objectives; and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.

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# Interest-Bearing Debt

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## Main Points

### What we examined

Debt management refers to how the Government of Canada raises funds to meet its borrowing requirements, what it decides and does about the composition of the market debt, and how it governs these activities. The Government of Canada's interest-bearing debt is made up of principally two sets of liabilities: market debt and public sector pension plan liabilities. Market debt is the part of the debt that the government borrows in financial markets and that is managed by the Department of Finance Canada. It totalled \$597 billion at 31 March 2011. Public sector pension plan liabilities are part of the non-market debt. These liabilities represent the government's obligations to the employee pension plans of the public service, Canadian Forces, and Royal Canadian Mounted Police (RCMP). They totalled \$146 billion at 31 March 2011.

Together, market debt and the pension plan liabilities make up over 92 percent of the interest-bearing debt, which totalled \$802 billion at 31 March 2011. In 2010–11, interest charges on the debt totalled \$30.9 billion and represented 11.4 percent of government expenses.

We examined how the Department of Finance Canada develops strategies to manage market debt. We looked at its risk management practices and at how it monitors and reports on performance of the debt-funding strategy. We also examined how the Department of Finance Canada and the Treasury Board of Canada Secretariat report information about charges on the interest-bearing debt as well as the budgetary impact of the public sector pension plan liabilities.

Audit work for this chapter was substantially completed on 31 October 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Debt management is the federal government's largest program (after transfers to seniors and to other levels of government). How market debt is managed has a direct impact on the government's fiscal strength. Debt managers need to set appropriate market debt strategies using robust processes and tools—first, to balance costs and risks so

that low-cost and stable funding can be raised, and second, to support well-functioning markets for Government of Canada securities.

Deteriorating sovereign debt conditions in the Euro zone and in the United States show the importance of having sound debt strategies, as they provide stability and assurance to market participants. Sound debt strategies will also support the fiscal sustainability of public finances in the long term.

In addition to market debt, public sector pension plan liabilities and associated debt charges have a large impact on the government's fiscal situation. It is therefore important that Canadians be provided with clear information on that debt, the associated interest charges, and their impact on budget deficits or surpluses. The significant amounts involved can influence policy choices by limiting what the government can afford to do.

#### What we found

- In developing its debt strategies, the Department of Finance Canada uses a sound process that relies on a detailed and robust debt strategy model and on the judgment of senior managers as well as on consultations with dealers and investors. The model and the qualitative/quantitative analyses help debt managers recommend preferred debt structures, and are major advances since our last audit 12 years ago.
- The Department is monitoring and achieving the objective of a well-functioning market for Government of Canada securities. Until recently, it was using metrics that did not provide a full assessment of the extent to which it was achieving the objective of raising low-cost, stable funding for the Government of Canada by arriving at a desired debt structure that strikes a balance between costs and risks. Subsequent to the period under review, the Department started monitoring better the extent to which it balances costs and risks, but it cannot yet demonstrate that the debt strategy is achieving the low-cost, stable funding objective. While the Department publishes clear information on the market debt, it could publish more details to indicate why a particular debt strategy was chosen and how well the program is performing.
- The Department of Finance Canada has a sound risk management framework in place to assess and monitor emerging risks as well as changes in financial requirements that could affect the debt strategy. However, it does not promote Government of Canada securities to market participants as well as it could to appeal to a broader base of investors.

- Canada is a leader among member countries of the Organisation for Economic Co-operation and Development (OECD) in recognizing in its financial statements the obligations arising from public sector employee pension plans. In fact, very few other countries report these obligations on their financial statements. However, while complete financial information on the pension plans is available, it is dispersed among several reports and not presented in easy-to-read formats. It is therefore difficult for parliamentarians and Canadians to readily understand the potential impact of these liabilities on the budgetary balance and how they influence policy choices. In addition, the composition of projected interest charges reported in the Estimates is not clearly presented. Finally, the Department of Finance Canada does not have timely access to the quarterly updates from the Public Sector Pension Investment Board about actual returns on public sector pension investments, which would help the Department assess the impact that unforeseen fluctuations could have on budget surpluses or deficits.

**The entities have responded.** The entities have agreed with our recommendations. Their detailed responses follow the recommendations throughout the chapter.



## Introduction

**Financial requirements**—The difference between cash coming in to the government and the cash going out. The government may finance a financial requirement by increasing market debt through the sale of government securities or by reducing its cash balances.

**Public sector pension plan liabilities**—The government's obligations for the three major pension plans it sponsors: the public service, Canadian Forces, and Royal Canadian Mounted Police plans.

**3.1** The Government of Canada issues securities—for example, marketable bonds in either domestic or foreign currency, treasury bills, and Canada Savings Bonds—to fund its **financial requirements**. As well, the government has other financial liabilities that are included in its interest-bearing debt (such as the public sector pension plans). To present an idea of the size of this debt, in 2010–11 interest-bearing debt totalled about \$802 billion. Each year, interest on this debt costs billions of dollars. In 2010–11, interest charges on the interest-bearing debt represented more than 11 percent of government expenses and 13 percent of the government's revenues.

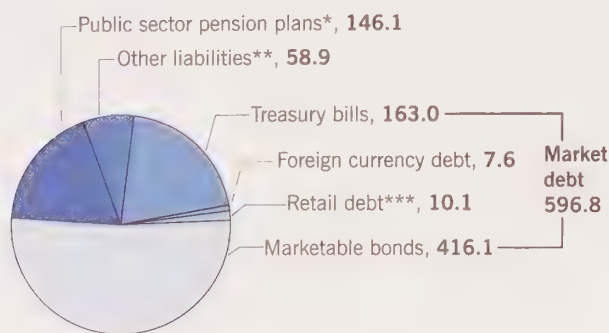
**3.2** For the purposes of this report, the Government of Canada's interest-bearing debt is made up of two main sets of liabilities:

- market debt—debt that the Government of Canada raises in financial markets, including marketable bonds in either domestic or foreign currency, treasury bills, as well as retail debt.
- non-market debt—principally made up of **public sector pension plan liabilities** and also including other liabilities such as government employee and veterans' future benefits.

**3.3** As of 31 March 2011, the government's market debt totalled about \$597 billion; the debt related to public sector pension plan liabilities totalled \$146 billion (Exhibit 3.1). Together, market debt and public sector pension plan liabilities added up to more than 92 percent of the interest-bearing debt.

**3.4** As shown in Exhibit 3.2, in 2010–11, interest charges on the interest-bearing debt totalled \$30.9 billion. Interest charges in such high amounts have a major impact on the government's surpluses or deficits. Marketable bonds, treasury bills, and public sector pension plan liabilities add up to \$725.2 billion (Exhibit 3.1) and cost taxpayers \$27.5 billion in interest charges (Exhibit 3.2). Every year, the Minister of Finance approves the debt management strategy, which sets out, among other things, the Government of Canada's objectives, strategy, and plans for managing its market debt. The accounting of other liabilities, such as the public sector pension plan liabilities and the debt management strategy that is chosen for borrowing funds, will influence interest charges.



**Exhibit 3.1 The composition of Canada's interest-bearing debt for the 2010–11 fiscal year (\$ billions)**

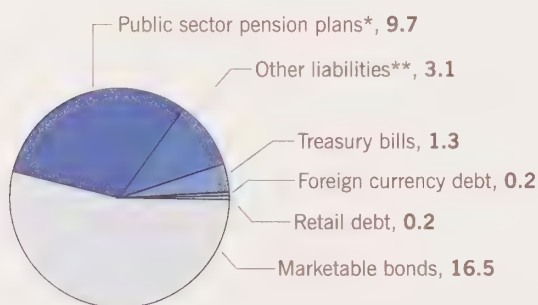
**Total: \$801.8 billion**

\* Pension liabilities also include \$802 million for the Members of Parliament pension plan and \$2.1 billion for the judges' pension plan.

\*\* Other liabilities include the future benefits of veterans and other employees; capital lease obligation (amount due for long-term asset lease agreements such as office space); and a market debt value adjustment (which includes revaluation of cross-currency swaps, unamortized discounts, and premiums on market debt).

\*\*\* Retail debt means the portion of the debt held by Canadians in the form of Canada Savings Bonds and Canada Premium Bonds.

Source: Public Accounts of Canada, 2010–11, Volume I

**Exhibit 3.2 The composition of the interest charges on public debt for the 2010–11 fiscal year (\$ billions)**

**Total: \$30.9 billion\*\*\***

\* Interest on public sector pension liabilities included \$37 million for the Members of Parliament pension plan and \$91 million for the judges' pension plan.

\*\* Other liabilities include the future benefits of veterans and other employees and obligations related to capital leases as well as revaluation of cross-currency swaps.

\*\*\* Total does not add up exactly due to rounding.

Source: Public Accounts of Canada, 2010–11, volumes I and III

### Who manages the debt?

**3.5** The Department of Finance Canada is responsible for managing the market debt and reporting information on it. The Treasury Board of Canada Secretariat, the Department of Finance Canada, National Defence, and Public Safety Canada have responsibilities for managing and reporting on the public sector pension plan liabilities (Exhibit 3.3).

### Influence of recent events on the interest-bearing debt

**3.6** The debt management program is the federal government's largest program (after transfers to seniors and to other levels of government). A key objective of this program is to meet its spending needs through stable, low-cost funding—that is, funding that strikes a balance between minimizing the level of interest charges (costs) and exposure to the volatility of interest charges (risks). A second key objective is to maintain a well-functioning market for Government of Canada securities, which helps to keep debt costs low and stable and generally benefits a wide range of participants in the domestic market.

**3.7** For 11 fiscal years, from 1997–98 to 2007–08, the government recorded budgetary surpluses. When compared to its peak in 1996–97, total market debt had declined by more than 17 percent by 2007–08 (Exhibit 3.4). Because the debt of the federal government was declining, reducing its need to borrow through securities, a continuing challenge for debt managers was to ensure that enough treasury bills and bonds were being issued to support **market liquidity**. In the 2007–08 fiscal year, debt managers had to suddenly manage rapidly increasing financial requirements. As seen in Exhibit 3.4, new government borrowing totalled \$203 billion between the 2007–08 and 2010–11 fiscal years.

**3.8** Policy decisions and events, such as the consolidation of the borrowings of some Crown corporations, the turbulence of financial markets, and federal government stimulus, led to an increase in government borrowing. These events and policy decisions, together with changes to the public sector pension plans, had an impact on the interest-bearing debt and its management. Appendix A explains in more detail these policy decisions and events.

**Market liquidity**—State of a market that depends on whether there are ready and willing buyers and sellers of government securities in large quantities (if so, it is considered a liquid market). Securities traded in large enough quantities can lower borrowing costs for the government.

## Exhibit 3.3 Roles and responsibilities in managing public debt and reporting information

Responsible organization	Responsibilities
<b>Market Debt</b>	
Department of Finance Canada	<p>Under Part IV (Public Debt) of the <i>Financial Administration Act</i>:</p> <ul style="list-style-type: none"> <li>• Provides strategic planning and the operational management of the government's borrowing.</li> <li>• Directs and oversees the policy and strategy for managing funds, submitting policy advice to the Minister, and preparing and publishing reports on fund management.</li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>• Analyzes and reports on Canada's budgetary situation, including interest charges and fiscal outlook.</li> </ul>
Bank of Canada	<p>Under the <i>Bank of Canada Act</i>:</p> <ul style="list-style-type: none"> <li>• Acts as the government's fiscal agent. As the government's fiscal agent, the Bank of Canada distributes Government of Canada marketable bills and bonds through auction to government securities distributors and customers.</li> </ul>
<b>Public Sector Pension Plan Liabilities</b>	
Treasury Board of Canada Secretariat	<p>Reporting on public service pension plan:</p> <ul style="list-style-type: none"> <li>• Under the <i>Public Service Superannuation Act</i> reports to Parliament (through the President) once a year on the administration of the public service pension plan, including the amounts paid into and out of the pension accounts.</li> <li>• Offers general guidance to the Royal Canadian Mounted Police and National Defence on accounting for their pension plans.</li> </ul> <p>(The Minister of National Defence and the Minister of Public Safety table annual reports under the <i>Canadian Forces Superannuation Act</i> and the <i>Royal Canadian Mounted Police Superannuation Act</i>, respectively, on how their plans are being run.)</p> <p>Public Accounts of Canada:</p> <ul style="list-style-type: none"> <li>• Under the <i>Financial Administration Act</i>, establishes the format of the Public Accounts of Canada jointly with the Department of Finance Canada (through the President of the Treasury Board and the Minister of Finance).</li> <li>• Reports the pension liability and pension expense in the <i>Public Accounts of Canada</i>, including the disclosures in the government's financial statements, making sure its accounting policies conform with Canadian generally accepted accounting principles for the public sector.</li> <li>• Ensures that actuarial valuations for all public sector pension plans are prepared as needed for the Public Accounts.</li> </ul> <p>Estimates:</p> <ul style="list-style-type: none"> <li>• Leads the preparation of the Estimates in support of the government request to Parliament to spend money, working with departments and agencies. (See paragraph 3.60.)</li> </ul>

**Exhibit 3.4** After a long trend of declining market debt, there was a sudden increase in the Government of Canada's market debt in 2008



Source: Department of Finance Canada, Debt Management Report 2010–11

### Focus of the audit

**3.9** The audit examined whether the Department of Finance Canada and the Treasury Board of Canada Secretariat, in keeping with their respective responsibilities, effectively managed the interest-bearing debt of the Government of Canada. This audit examined debt management and reporting practices between 1 April 2007 and 31 March 2011. The audit focused on the interest-bearing debt, including how market debt is managed and how the impact of the public sector pension liabilities (public service, Royal Canadian Mounted Police (RCMP), and Canadian Forces, including the Reserve) is monitored and reported.

**3.10** We audited parts of the interest-bearing debt that include domestic marketable bonds, treasury bills, and public sector pension plan liabilities. We did not examine the retail debt program, foreign currency borrowings, or the consolidation of borrowings by Crown corporations. We also left out liabilities linked with the pension plans of federal judges and members of Parliament because they follow different regimes, as well as other liabilities such as capital lease obligations, and the future benefits of veterans and other employees.

The audit scope represents about 90 percent of the total interest-bearing debt.

**3.11** We looked at the processes and tools the Department uses to support and develop strategies for market debt. We also looked at how the Department manages risks and how the performance of the strategy for debt management is monitored, as well as how performance results are used to support debt management decisions, including the results achieved so far. Finally, we looked at how the Department and the Secretariat report information on public sector pension plan liabilities, the interests on these liabilities, and their budgetary impact on the government's fiscal position.

**3.12** More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations and Recommendations

### Strategies for funding market debt

**Debt structure**—Combination of types and terms of securities that the government issues, including, for example, 30-year bonds or short-term treasury bills.

**Debt rollover**—Refers to the renewal of a portion of the market debt that is arriving at maturity at a specific date and needs to be refinanced.

**3.13** Choosing a financing strategy for managing debt that meets program objectives is a challenge when fiscal and economic outlooks are uncertain and financial markets are volatile. Debt managers need to balance costs and risks in order to meet the government's objectives of raising low-cost, stable funding and helping to support well-functioning markets for Government of Canada's securities. To meet these objectives, debt managers need to gradually move toward a **debt structure** that, in the long term, will minimize interest charges subject to managing **debt rollover** over time and providing liquidity across different maturity sectors.

**3.14** Both quantitative information and the judgment of debt managers need to contribute to good strategy for managing debt. Fiscal and economic outlooks, debt management strategy analyses, and input from market participants (distributors and dealers buying and trading securities) gathered through consultations should guide debt managers to find a balance between the level of interest charges (costs) and the volatility of interest charges (risks), and to maintain well-functioning markets for government securities.

**3.15** The government can choose from various financing strategies to meet its program objectives. When issuing securities, the government must consider the best funding options—securities can be issued in a variety of options, such as 3-, 6-, and 12-month treasury bills and 2-, 3-, 5-, 10-, and 30-year bonds (including 30-year inflation-adjusted bonds). Debt managers recommend which options to issue after



considering borrowing costs, stability of interest charges, refinancing risks, and impact on domestic securities markets. Normally, issuing long-term securities to fund debt costs more, but it makes future borrowing costs more predictable and reduces refinancing risks. Conversely, short-term debt is less costly, but it increases the volatility of interest charges and the risk that the borrower could be exposed to potential refinancing difficulties. Debt managers must make trade-offs between low-cost, short-term financing and longer-term, more costly, but less risky financing.

**3.16** Using indicators (metrics) for monitoring and reporting the performance of the debt management strategy is key to managing debt effectively. International organizations such as the World Bank and the Organisation for Economic Co-operation and Development (OECD) recommend the regular assessment of the performance of a debt management strategy. Monitoring and reporting on indicators assure managers that the results are in line with the government's objectives for managing debt.

**3.17** We examined the decision-making process that is in place at the Department of Finance Canada to support market debt strategies and policy recommendations, including how the Department's debt strategy model, a computer program that simulates different financing strategies, is used to support debt managers in meeting the financial needs of the Government of Canada. We looked at whether the debt managers are ensuring that the model is producing reliable results. And, we looked at whether the Department uses indicators to assess and report on the performance of the debt management strategy. We looked at research documents, presentations, and minutes of meetings where senior managers discussed and analyzed debt strategies. We also interviewed officials from the Department and the Bank of Canada, as well as debt management officials in some foreign jurisdictions.

### **The Department of Finance Canada uses a debt strategy model to support funding decisions**

**3.18** We found that the Department has access to much more sophisticated tools and methods of analysis than were available 12 years ago, when we last performed an audit of market debt management practices. The Department has put in place a sound process that relies heavily on the use of quantitative analyses to develop debt management strategies and establish trade-offs when balancing program objectives. The Department and the Bank of Canada have developed a detailed and complex debt strategy model (Exhibit 3.5). Work on that model started in 2002, and major

enhancements were made in 2007. Using assumptions about the changing economy, interest rates, and financial requirements, the model is made of more than 250 subroutines and over 100 parameters to project various mixes of the debt structure.

#### Exhibit 3.5 The debt-strategy model helps debt managers develop a medium-term debt strategy

##### The model

The debt-strategy model's results allow debt managers to identify the relationship between risks (volatility) and interest charges on debt (cost) by generating a graphical representation known as an "efficient frontier."

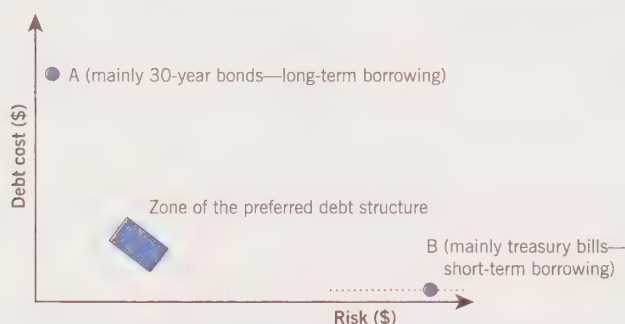
The model includes sets of equations that compute, assuming a given debt management strategy and future macroeconomic and interest-rate outcomes, how the maturing debt and new financial requirements are refinanced, how interest charges are calculated, and how these outcomes affect the size and makeup of the debt.

##### Developing a medium-term debt strategy

Debt managers use the model results to recommend a debt structure that supports the desired cost versus risk trade-off while taking into account rollover risk, maturity profile, and liquidity requirements over the medium term.

The graph below shows that while relying on long-term bonds will lead to higher costs (see point A), it should also result in reduced volatility. Conversely, lower debt costs can be achieved if more short-term securities are issued, such as treasury bills (see point B). The short-term approach will, however, lead to higher volatility. The model helps debt managers identify a zone where the cost and risks are best balanced in order to raise low-cost and stable funding.

Efficient frontier that summarizes the relationship between costs and risks



**3.19** The model makes it possible for debt managers to understand the complex relationship between key economic outcomes and helps them identify a desirable funding mix. The **medium-term debt strategy** created in 2010–11 was supported by analyses and results of the 2007 debt strategy model.

**Medium-term debt strategy**—The government's strategy plan for issuing securities over a horizon of three to five years to achieve a desired composition of the government debt.

### Judgment and qualitative analyses inform decisions about debt strategies

**3.20** We found that the Department can set the model's parameters so that all funding options are retained, which is both prudent and essential for making funding flexible and adaptable to changing funding requirements, as was the case in 2008. Parameters are set to address issues such as

- identifying the minimum amount of government securities (minimum benchmark sizes for each sector) that should be issued, using comments from market participants and the judgment of debt managers;
- establishing the premium that the government would pay (also known as the penalty function or liquidity premium) if the amount of securities issued is not meeting market expectations (this parameter relies on debt managers' judgment and is adjusted with feedback from market specialists); and
- determining which mix of maturities should be used to minimize refinancing risk and to spread out those maturities over the course of a year.

**3.21** The model's recent results show the advantage of issuing more short- and medium-term bonds rather than issuing long-term bonds. The model shows that such strategies, while improving the debt structure in the long run, would also reduce risks of increased interest charges. Using simulation results and their own judgment, debt managers can compare cost and risks to identify a set of possible funding strategies to recommend to senior management and the Minister. The recommendation also takes into account exposure to **rollover risk**, maturity profile, and liquidity requirements.

**Rollover risk**—The risk that debt will have to be refinanced at higher cost or, in extreme cases, cannot be refinanced at all.

**3.22** We found that debt managers present to senior management assumptions about interest rates, the macroeconomic environment, and fiscal planning. The fiscal outlook that the Department uses to plan the debt management strategy is in keeping with the projections used in the government's annual Budget (including projected budgetary deficits or surpluses and financial requirements). Debt managers hold discussions with officials from the Economic and Fiscal Policy Branch at the Department of Finance Canada on interest rates scenarios, budgetary volatility, and risk tolerance levels. Also, officials consider the fiscal situation and financial requirements when they review the proposed debt management strategy. Financial requirements are updated twice a year and reviewed monthly. Debt managers consider the uncertainty around these requirements.

**3.23** When selecting the most favourable debt portfolio, senior management takes into account risk preferences, risk tolerance, and constraints the government is facing when issuing securities. The constraints include the minimum and maximum dollar amount of securities to issue for a well-functioning market. In our review, we noted that senior managers consider these factors when choosing the best debt management strategy, and use judgment when recommending this strategy to the Minister of Finance.

**Government securities auction**—A process used for selling Government of Canada debt securities (mostly marketable bonds and treasury bills) in which issues are sold by public tender to financial institutions authorized to bid.

**3.24** Active market participation is needed for **government securities auctions** to be successful and to meet the objectives of the debt management program. We found that feedback from market participants is a key part of the decision-making process for recommending options for the debt management strategy.

**3.25** The government follows a strategic approach for its domestic borrowing. Debt managers build a relationship with market participants based on the government's credibility and predictability (for example, through transparent operations and a pre-announced calendar for issuing securities). Over the long term, this approach could lead to lower borrowing costs, lower risks, and well-functioning markets for government securities. The financial crisis of 2008 and the more recent deterioration in sovereign debt conditions in the Euro zone and in the United States as the audit was being completed show the need for sound debt strategies, as they provide stability and assurance to market participants.

**3.26** Discussions on the different funding options allow market participants to express their views and concerns over the debt management strategy. Regular consultations with market participants cover general market conditions, explore how effective the borrowing program is, and validate the government's modelling assumptions, such as the minimum size of securities to be issued in dollars. Debt managers take into account the views of market participants but also rely on their judgement and on the results of the model to come to a final decision. For example, we found that debt managers discussed re-issuing the 3-year bond with market participants, who expressed some concerns about the re-introduction of the 3-year bond after a 12-year gap. Debt managers used their judgment as well as the results of the model to recommended re-issuing the 3-year bond. In another example, market participants expressed a preference for the government to increase the amount of 30-year bonds it issues, but debt managers recommended against it because it would have been more costly over the long term.



## The Department has verified the soundness of the debt strategy model

**Sensitivity analysis**—In the context of testing the reliability of the debt strategy model, an analysis that determines how different assumptions will affect the results the model produces.

**Stress test**—A simulation technique used on a model or a system to find out its reactions to different, sometimes hypothetical and extreme, scenarios.

**3.27** As the model's simulation results support the process for choosing a strategy, debt managers must ensure that the model is well designed and comprehensive in its calculations and simulations. Different approaches to modelling will lead to different forecasts of key risks and cost characteristics for a given financing strategy. An important step in testing the soundness of the model is doing a **sensitivity analysis** of the results to ensure that the model is reliable.

**3.28** Several key parameters must be assessed before the model's results can be used to support decisions on the debt management strategy. We found that sensitivity analysis has been done on the model. This analysis showed that the modelling results were appropriate for informing debt managers on the best debt management strategy. We also found that model results were tested by applying potential optimistic and pessimistic economic scenarios (**stress tests**).

**3.29** We found that the Department exercised due diligence in reviewing the model's variables and assumptions. For example, in 2007, the Department hired a specialist to assess the model. The specialist recommended changes to the model to improve its functionality, and those changes were made.

**3.30** We found that the Department of Finance Canada and the Bank of Canada are sharing information and working with other sovereign debt model specialists to constantly improve the government's debt strategy model. Notably, a foreign debt management office is considering implementing the Canadian debt strategy model.

## Reporting on the overall performance of the debt management strategy to the senior level needs further improvement

**3.31** Debt managers need to ensure that the debt management strategy's performance meets debt management program objectives and the expected results of the strategy. For many years, the main indicator that debt managers used to make sure that the government had access to stable, low-cost capital was the percentage of fixed-rate debt in the portfolio. The Department concluded that the fixed-rate share alone did not give enough information about how the debt portfolio was performing compared to the objectives of the debt management strategy.

**3.32** We found that the Department does monitor the debt portfolio. The Department and the Bank of Canada developed a new quarterly



debt management report in March 2011. The report monitors the debt portfolio and provides senior management with information such as

- the government's financial requirements;
- outstanding debt by types and terms of securities;
- upcoming maturities; and
- the results of recent securities auctions, which are monitored to measure how well the market reacted to the auction.

**3.33** In this quarterly report, the Department uses a set of indicators that includes

- average term to maturity;
- refinancing share (debt that is being refinanced within the next year as a percentage of the debt portfolio);
- bonds maturing;
- total outstanding market debt; and
- other selected indicators (for example, **tail, yield, and auction coverage ratios** from securities auctions).

**Tail**—The difference between the highest accepted yield and the average yield of the auction. Tail below 1 basis point reflects high liquidity of debt securities and is considered an indication of the overall effectiveness of auctions.

**Yield**—The discount rate that makes the market price of a government security equal to its discounted present value.

**Auction coverage ratio** (also known as “bid-cover ratio”)—The total amount of bids received divided by the dollar value of the securities that were auctioned. A large ratio tends to be associated with a large demand and therefore should result in a lower average auction yield. For example, a ratio of 2 means that bids from market participants were two times higher than the dollar amount offered by the government.

**3.34** The quarterly report allows officials to monitor how well the debt management strategy is meeting the objective of maintaining a well-functioning market for Government of Canada securities. This information allows debt managers to assess how well the market for Government of Canada securities functions and the success of the medium-term debt strategy. Exhibit 3.6 shows the very low borrowing costs (low yield), high auction coverage, and low tail results for selected Government of Canada bonds issued just before 31 March 2011. The Department of Finance Canada is therefore monitoring and achieving the well-functioning market objective.

**3.35** During the period under review, debt managers were using metrics such as the fixed-rate ratio—the ratio of fixed-rate debt to the total debt. These metrics did not provide a full assessment of the extent to which the debt management strategy was meeting the objective of raising stable and low-cost funding by striking a balance between costs and risks associated with the debt structure. Senior management was therefore not getting reports to track the performance of the debt management strategy. Without this information, debt managers and senior management did not know if the strategy was successfully meeting the stable and low-cost funding objective.

**Exhibit 3.6 Selected Government of Canada securities auctions were favourable\***

Term	Auction date	Average yield (%)	Auction coverage ratio	Tail (basis points)
2 year	9 March 2011	1.867	2.690	0.10
3 year	23 March 2011	2.022	2.552	0.33
5 year	2 March 2011	2.700	2.315	0.37
10 year	2 February 2011	3.482	2.276	0.66
30 year	17 November 2011	3.638	2.859	0.25

\*Low yield, high auction coverage, and low tail results bring about favourable conditions.

Source: Bank of Canada

**3.36** Subsequent to the period under review, the Department of Finance Canada started to monitor the actual debt structure against the desired debt structure on the efficient frontier, the graph that summarizes the relation between cost and risks, and to report results to senior management. With this information, management will be able to assess how the actual debt structure compares to the planned medium-term debt strategy and can adjust that strategy if needed. While the objective of raising stable and low-cost funding is now better monitored, the Department of Finance Canada has yet to demonstrate that the debt structure is achieving the expected results because it just started monitoring the progress of the debt management strategy toward the preferred debt structure, and little data is available. We encourage the Department to pursue its efforts in assessing the key objective of raising low-cost stable funding and in reporting the performance results to senior management.

## Management of emerging risks

**3.37** Unforeseen events could have major financial implications for the government, such as higher interest charges, refinancing difficulties, or larger cash requirements. For these reasons, debt managers must effectively manage emerging risks. International best practices on public debt, such as guidance by the International Monetary Fund and the Organisation for Economic Co-operation and Development, recommend risk management activities such as identifying and assessing risks, measuring and monitoring the impact of risks, mitigating and controlling risks, and finally, regularly reporting on risk issues.

**3.38** We examined whether the Department of Finance Canada has a sound framework for risk management to identify, measure, monitor,

and report on new risks that could have an impact on the debt management strategy. We examined how emerging risks are identified and reported to senior management and how the strategy is updated to mitigate emerging risks, such as sudden changes in financial requirements or market conditions. We reviewed the documents that were presented to senior management and interviewed Department officials and selected stakeholders.

### **A sound risk management framework is in place**

**3.39** As noted in this chapter, the debt strategy model factors in the impact of interest rate risk, rollover risks, and budgetary volatility when computing results. These risks are taken into account when debt managers target the most desirable debt management strategy.

**3.40** We found that debt strategies also include risk analyses and contingency plans. Managers consider both pessimistic and optimistic scenarios. For example, we found that the issuing of treasury bills can be adjusted rapidly if the government needs to borrow more funds than planned for in the debt management strategy. At the peak of the financial turmoil in the 2008–09 fiscal year, the Department relied heavily on treasury bills to fund new government programs and growing financial requirements. In the 2008–09 fiscal year, borrowing through the sale of treasury bills grew by \$75.5 billion to \$192.5 billion. Borrowings through bond auctions can also be adjusted to reflect changing circumstances, but consultations with market participants may be required.

**3.41** We found that the Department's risk management framework allows debt managers to assess, monitor, mitigate, and report risks. Senior management looks at how to fund financial requirements based on different economic growth scenarios. We also found that the Department makes projections of financial requirements for the next 10 years and considers different debt strategies.

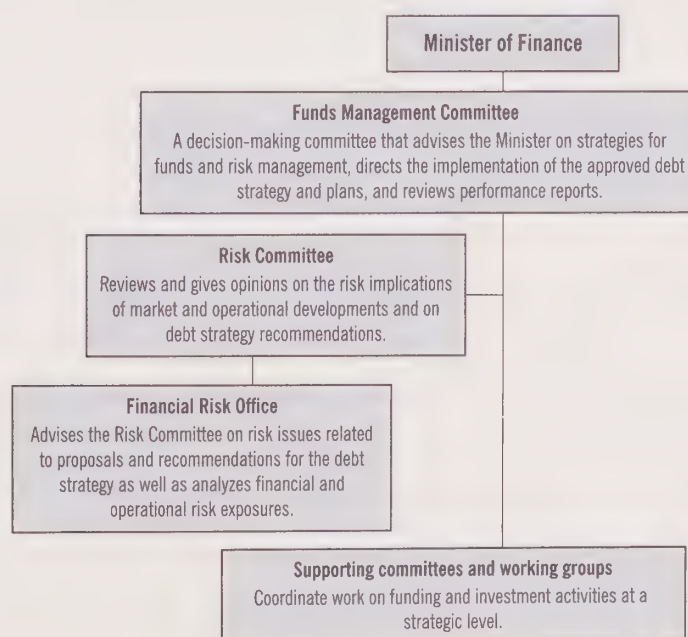
**3.42** Many events can affect the planned financial requirements. In 2008–09 and 2009–10, during the financial crisis and because of rapidly changing financial requirements, the Department reviewed the debt management strategy during the year. The reintroduction of the three-year bond in 2009 is another example of how debt managers adapted the strategy to fund growing financial requirements. In 2010–11, the Department gave a mid-year update to the Minister as part of the process for fall market consultations. Mid-year updates on the debt management strategy are provided to the Minister of Finance and explain why there is a need or not for a new strategy.

**3.43** The Government of Canada holds liquid financial assets, such as cash deposits, to safeguard its ability to meet payment obligations in situations where normal access to funding markets may be disrupted or delayed. The government's overall liquidity levels are intended to cover at least one month of the net projected cash flows, including interest to be paid and debt refinancing needs. According to the Debt Management Strategy 2011–12, to meet these liquidity levels by 2013–14, government cash assets and foreign denominated financial assets will need to grow by an additional \$35 billion. This increased level of liquidity will improve the government's ability to meet payment obligations should normal access to funding markets be disrupted or delayed. It will also support investor confidence in Canadian government debt.

### Emerging risks are monitored

**3.44** To enable senior management to discuss risk issues, the government has formed committees under a governance framework for funds management (Exhibit 3.7). The Risk Committee, which advises the Funds Management Committee, reviews and gives opinions on the risk implications of market and operational developments and on policy recommendations. The Risk Committee meets quarterly. It is

**Exhibit 3.7 The Governance Framework manages risks**





made up of senior officials from the Department and the Bank of Canada, as well as an external member. The external member was added in April 2010 for a two-year term to improve knowledge of ongoing developments in best practices for risk management and to provide better oversight. Because the Department and the Bank of Canada have different responsibilities, we found that the two organizations often have different views on debt issues. These different perspectives can benefit risk management. For example, before the Funds Management Committee submits a debt strategy proposal to the Minister for approval, Bank of Canada and Department officials thoroughly debate it and consider all aspects of it.

**3.45** The Financial Risk Office advises the Risk Committee on risk issues related to policy proposals and recommendations and analyzes financial and operational risk exposures. The Office is staffed by officials from the Bank of Canada and is independent from funds management operations at the Bank.

**3.46** The Funds Management Committee is made up of senior officials from the Department and the Bank of Canada. This decision-making committee's mandate is to advise the Minister on policy and strategy for funds and risk management, direct the implementation of approved strategy and plans, and review performance reports. We found that as part of its annual recommendation for the debt management strategy, which it submits to the Funds Management Committee and the Minister for approval, the Department identifies and analyzes selected risks that affect the domestic borrowing plan.

**3.47** There are some discussions about domestic issues, such as debt strategy modelling, the retail debt, and borrowing by Crown corporations. However, we found that discussions at the Risk Committee were focused mainly on risks related to liquidity, foreign currency borrowing, and foreign financial assets, including sovereign debt issues. Discussions also focused on immediate emerging issues. As we were completing this audit, the Department provided certain simulation results showing that debt managers consider long-term fiscal sustainability. We encourage the Department to pursue its efforts in analyzing how fiscal sustainability issues could affect debt strategies in the future.

#### **The Department has a limited strategy for nurturing relations with new investors**

**3.48** Recent events abroad have proven that loss of confidence and a weakening fiscal position have a major impact on borrowers. In a crisis, such as a severe economic downturn or a natural disaster, having a



diversified base of investors allows debt managers to distribute government securities more easily and reduce refinancing risks. In this context, encouraging more competition among market participants would lead to wider distribution of government securities, which reduces the financing cost for the government. Therefore, a key element in managing risk for domestic debt is nurturing and maintaining relations with market participants.

**3.49** Because communication between debt managers and investors is important, some international organizations have created guidelines on this subject. The Institute of International Finance lists a number of best practices for communicating with investors, including the following:

- Staff responsible for investor relations should be identifiable and reachable through the government's website.
- Archives of presentations and conference call materials directed at market participants should be available on the website.
- Macroeconomic data should be presented in a user-friendly format.
- Market participants should be able to subscribe to the government's website.

The Ontario Financing Authority carries out the practices listed above. Brazil and France are among sovereign issuers of securities that make promotional presentations to other countries and provide macroeconomic data on their websites. Australia actively promotes its government securities by making presentations to investors abroad.

**3.50** We found that the Department of Finance Canada and the Bank of Canada use a mix of communication approaches to consult with market participants on debt strategy matters (such as bilateral visits, multilateral discussions, and the annual consultation process). We found, however, that the information the Government of Canada provided to potential new market participants is limited. Economic, financial, and government borrowing information is found in different documents and websites. Also, there are no presentations available online to actively promote Government of Canada securities to potential investors. We believe this limited effort in reaching out and informing investors does not help Canada to build, diversify, and broaden its base of investors. If there were a sudden increase in financial requirements that needed to be funded abroad, Canada might not be well-positioned to attract this funding.

**3.51 Recommendation.** The Department of Finance Canada should provide better financial information to market participants and expand its communication and marketing tools, as well as its promotional activities in order to reach a broader base of investors.

**The Department's response.** Agreed. The Department of Finance Canada's website contains a wide range of materials on Canada's borrowing programs, debt strategy, and economic and fiscal performance. The Bank of Canada's website also contains details on Canada's debt auctions. That said, the Department and the Bank plan to expand the range of economic, financial, and borrowing information available on their websites, provide better links between the two sites, and improve the organization of this information to make it more easily accessible. The Department recognizes the importance of maintaining and building on Canada's strong reputation in global capital markets and will take steps to increase its engagement with domestic and international investors as opportunities present themselves.

In terms of expanding promotional activities, the Department would note that the investor base for Government of Canada securities has grown in recent years, that debt auctions have been well covered, and that Canada's global foreign-currency bond issues have met with very strong demand from international investors. Devoting significantly more resources to investor relations and associated promotional activities would not provide value for money.

## Reporting information on the interest-bearing debt

**3.52** Reporting clear and complete information on the interest-bearing debt allows for better accountability. This reporting includes comparing the planned debt management strategy with actual results and providing information on the budgetary impact of government liabilities. Budget documentation and fiscal reports should cover all of the government's budgetary activities (such as transfer payments, operating expenditures, and interest charges on the public debt) as well as non-budgetary ones (for example, loans and investments). The International Monetary Fund and the Organisation for Economic Co-operation and Development (OECD) have recommended that fiscal information be presented in a way that facilitates policy analyses and promotes accountability.

**3.53** We examined whether the Government of Canada reported complete and clear information on the market debt and the public sector pension plan liabilities. We reviewed the public documentation that reported information on the interest-bearing debt, including public sector pension plan liabilities, and we reviewed briefing material

and minutes from senior management committee meetings. We interviewed officials from the Department of Finance Canada, the Treasury Board of Canada Secretariat, and the Office of the Chief Actuary. Finally, we reviewed how four countries rated very high by credit rating agencies (Denmark, Finland, France, and United Kingdom) report their interest-bearing debt.

### **Market debt is reported clearly, but there is room for improvement**

**3.54** Parliamentarians and Canadians can read the Debt Management Strategy, which is a report annexed to the Budget early each year, and the Debt Management Report late in the fall, to better understand market debt issues. These reports contain information on market debt management, including the government's objectives, planned borrowing activities, and the medium-term debt strategy. The reports also include several indicators, such as how many domestic marketable bonds and treasury bills the government has issued, the dollar amount issued per securities (for example, 2-, 3-, and 5-year terms), the composition of the market debt, the refixing share of debt, and the average term to maturity.

**3.55** Compared to other governments (such as Denmark and the United Kingdom), the Government of Canada gives little analysis to explain the chosen debt management strategy. For example, the Department of Finance Canada does not publish the results of the debt strategy model and information to understand funding choices and why a particular strategy was chosen. This information would allow parliamentarians and Canadians to better understand the government's debt management strategy. For instance, it could explain why the government believes that short-term borrowing (such as using treasury bills), while less expensive, is not desirable because of the impact on rollover risk or why locking-in at relatively low interest rates for 30 years in order to provide stable interest charges in the long term is too costly.

**3.56** As explained before, while performance information on the well-functioning market objective is presented to senior management, the Department has recently developed new metrics to monitor the low-cost stable funding objective, and it is reporting these to senior levels. We believe that the Department needs to better disclose performance results of the debt management program in the reports it publishes. We found that the Department is reviewing ways to improve the information it publishes and is looking at how it presents and supports its debt management strategy in its reports. The Department has also

said it will adapt its debt reporting practices, as needed, to be more transparent.

**3.57 Recommendation.** The Department of Finance Canada should improve its reports on the market debt by including the analysis that supports the debt management strategy and information on the overall performance results against planned outcomes. These improvements will help better inform parliamentarians, Canadians, and investors on the actual results of the debt management strategy.

**The Department's response.** Agreed. Where feasible, the Department of Finance Canada will aim to improve the information content of our reports.

We would note, however, that compared to its peers, Canada is already among the most informative in terms of its debt management reporting. The Debt Management Strategy and Debt Management Report are among the most transparent documents of the G20 countries with respect to describing the government's debt strategy as well as providing performance outcomes. New metrics have been added to recent reports. The Department also publishes external evaluations of debt management programs and operations conducted under the Treasury Evaluation Program. Additionally, a number of papers on Canada's stochastic debt strategy model are available on the Bank of Canada's website.

#### Information on the non-market debt needs to be clarified

**3.58** As of 31 March 2011, the liability of public sector pension plans, which is part of the government's gross debt, totalled \$146 billion. In other words, about 18 percent of the \$802 billion in interest-bearing debt was related to public sector pension plans. In 2010–11, around \$9.7 billion of the \$30.9 billion in interest charges was related to the interest expense on the public sector pension plans (Exhibit 3.1). It is important to monitor and report on how these liabilities and interest charges could affect the government's fiscal situation.

**3.59 Reporting on public sector employee pension plans.** The government sponsors defined benefit pension plans for its employees, notably the employees of the public service, the Canadian Forces (including the Reserve Force), and the Royal Canadian Mounted Police (RCMP). The government has a statutory obligation to pay benefits relating to these pension plans. Canada is a leader among member countries of the OECD in recognizing in its financial statements the obligations arising from the public sector employees'



pension plans. Very few countries report public sector employee pension obligations on their financial statements. Most European countries do not report them. In order to ensure comparability among countries, the OECD excludes these liabilities from the debt to be reported in the governments' finance statistics.

**3.60 Reporting interest charges in the Estimates.** Parliamentarians rely on several sources of information to review government operations. For information on projected government expenditures, they mainly use the **Estimates** documents, because Parliament has a fundamental duty to scrutinize and approve expenditures to be voted on. Each year, the government prepares the Estimates in support of its request to Parliament for authority to spend public money. These Estimates are tabled in the House of Commons and include information on voted expenditures and statutory expenditures. Voted expenditures are amounts included in an appropriation bill to be authorized by Parliament. Statutory expenditures are amounts for which parliamentary authority has already been obtained through other legislation and is presented in the Estimates for information purposes only. According to the Main Estimates 2011–12, statutory expenditures on “interests and other costs” could total \$30.2 billion.

**3.61** “Interest and other costs” include interest paid on the market debt and interest related to the **superannuation accounts** (see Appendix A). Combining them in the Estimates obscures the fact that a third of the projected interest charges do not involve payment in cash. Fluctuations in projected interest charges due to variations in interest related to the superannuation accounts or interest charges on market debt cannot be easily distinguished. In our 1991 Report, Chapter 8—Debt Management and Employee Pensions, we observed that the reporting of interest charges was confusing because the interest expense relating to pension accounts was charged to the Department of Finance Canada as part of total public interest charges. The Department responded that it would consider the merit of disclosing further information. Forecasted expenditures mixing cash with transactions not involving cash are not limited to the “interests and other costs.” They are commonly used in the Estimates. This presentation is unclear and can confuse parliamentarians and the public about what is included in the Estimates.

**3.62 Recommendation.** Given the magnitude of charges related to the superannuation accounts, the Treasury Board of Canada Secretariat and the Department of Finance Canada should improve the clarity of information on interest charges by separating, in the

**Estimates**—Documents prepared to support appropriation acts. Expenditures made by government require the authority of Parliament. That authority is provided in two ways: annual appropriation acts that specify the amounts and broad purposes for which funds can be spent, and other specific statutes that authorize payments and set out the amounts and time periods for those payments. The Estimates provide additional information on voted amounts included in the appropriation act. Forecasts of statutory amounts, including interest charges, are also presented to give a more complete picture of total expenditure authorities for use during the fiscal year.

**Superannuation accounts**—Pension funds established to record transactions relating to service accrued by members of the public service, Canadian Forces, or RCMP pension plans before 1 April 2000. In essence, the superannuation accounts are legislated ledgers and do not hold assets.



Estimates, the projected interest charges for the market debt from other interest charges in order to improve transparency.

**The Department's response.** Agreed. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to present a breakdown of interest and other costs in the Estimates.

**The Secretariat's response.** Agreed. The Department of Finance Canada will produce for the Estimates a breakdown of interest and other costs, starting with the 2012–13 Estimates, which the Treasury Board of Canada Secretariat will publish.

**3.63 Information on public sector pension investments.** Changes in market conditions could cause public sector pension plan assets, net liabilities, and related interest charges to fluctuate. We found that the Department, with the exception of the annual report, does not have timely access to quarterly information about actual returns on public sector pension investments to assess the impact that unforeseen fluctuations could have on budget surpluses or deficits.

**3.64** Interest expenses credited to superannuation accounts (pre-2000 contributions) are calculated using a formula that sets the interest rate. The interest expenses associated with accrued pension benefits (for both pre and post-2000 pension obligations) are determined based on the results of the actuarial valuations performed for accounting purposes and the application of generally accepted accounting principles for employee future benefit accounting. The methods used to calculate these interest expenses offset year-over-year volatility, limiting the potential effects on annual interest charges in the fiscal year where the market conditions changed. Interest charges associated with these liabilities are subtracted from the return on assets managed by the **Public Sector Pension Investment Board** (PSP Investments) (see Appendix A). Even though the return on assets is also smoothed, as the size of assets of the public sector pension funds increases over time, significant changes in investments performance could have a large cumulative impact on the budgetary deficit or surplus. According to PSP Investments' 2011 Annual Report, consolidated net assets are likely to reach some \$300 billion by 2030.

**Public Sector Pension Investment Board**—An investment board created in 2000 and responsible for managing the assets held in the public sector pension funds for post-2000 contributions to pension plans.

**3.65** During the period under review, growth in assets under PSP Investments and fluctuations on the return on total assets led to annual variations of \$300 million to \$700 million in public interest charges. Such variations need to be actively monitored, especially in the context of increasing assets under management and larger market

volatility. If not monitored, the government's ability to project its budgetary deficit or surplus and meet its target could be jeopardized.

**3.66** The Department is not provided with a quarterly update report on PSP Investments' performance under the *Public Sector Pension Investment Board Act*. In the future, as the size of assets increases, this financial information would be helpful for the Department to forecast the impact that variations in returns on pension funds assets could have on future deficits or surpluses.

**3.67 Recommendation.** The Department of Finance Canada should seek interim information regarding the actual return of public sector pension plan investments in order to properly assess their impact on budgetary deficits or surpluses, as their potential impact on interest charges will grow with the size of assets.

**The Department's response.** Agreed. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to establish a process for the sharing of interim financial information regarding public sector pension plan investments.

The Department would like to note, however, that it already has access to sufficient information to properly assess the impact of investment returns on the budgetary balance. As a result, the added value of this interim financial data is considered minimal.

**3.68 Information on public sector pension plan liabilities.** Pension accounting and actuarial valuation of pension liabilities are complex subject areas that can be difficult for people to understand. Thus, it is necessary for management to provide clear information. We found that there is no clear information available to help Canadians understand pension liabilities and how these liabilities and related interest charges are calculated. We also found that the government reporting in this area could be improved by presenting the information in a more easily understandable format.

**3.69** No single organization is responsible for monitoring or reporting information on the public sector pension plan liabilities. To gather information on the public sector pension plan assets, liabilities, and related interest payments, users must refer to nine separate reports that contain complex and fragmented information:

- Public Accounts of Canada,
- the PSP Investments Annual Report,
- the Report on the Public Service Pension Plan,

- the Actuarial Report on the Pension Plan of the Public Service of Canada,
- the Annual Report: Canadian Forces Pension Plan,
- the Actuarial Report on the Pension Plan of the Canadian Forces—Regular Force,
- the Actuarial Report on the Pension Plan of the Canadian Forces—Reserve Force,
- the Annual Report: Royal Canadian Mounted Police Pension Plan, and
- the Actuarial Report on the Pension Plan for the Royal Canadian Mounted Police.

Each of these reports has its own purpose and audience. The Public Accounts of Canada Volume I includes notes to the Financial Statements of the Government of Canada in section 2 and section 6 on the interest-bearing debt. The annual reports on pension plans provide details on operations of the individual plans for the latest fiscal year. The actuarial reports, published for each plan every three years, report on the state of the different components of each pension plan to help the responsible minister make informed decisions about financing the government's pension benefit obligation. The PSP Investments Annual Report provides information on the pension funds' investment return of the assets under management, among other things.

**3.70** In Canada, the government has not consolidated information on the public sector pension plans in an easy-to-read document showing how these liabilities affect the interest-bearing debt. While this information is captured in part in the Public Accounts of Canada and other documents, parliamentarians and the public do not have access to information in an easy-to-read format that would help them understand how these liabilities affect the government's overall fiscal strength.

**3.71** In our view, information on the public sector pension plan liabilities could be reported in a better way. It could include a complete description of the methodology, the assumptions, and the discount rates used to assess the liabilities as well as the interest charges related to public sector pension plans. This information could also include the projected fiscal impact of these liabilities. Such reporting would allow parliamentarians and Canadians to understand the financial implications of the public sector pension plan liabilities.

**3.72 Recommendation.** The Treasury Board of Canada Secretariat and the Department of Finance Canada should report, in a consolidated manner, clear and understandable information on the public sector pension plan liabilities (including supporting methodology and assumptions) and should explain their impact on the government's finances.

**The Department's response.** Agreed. The Public Accounts of Canada is intended to provide clear and understandable summary information on the government's public sector pension plan liabilities and their impact on the government's financial results. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to look at ways of improving the presentation of public sector pension plan information in the Public Accounts.

**The Secretariat's response.** Agreed. The Public Accounts of Canada is intended to provide clear and understandable summary information on the government's public sector pension plan liabilities and their impact on the government's financial results. The Treasury Board of Canada Secretariat will work with the Department of Finance Canada to look at ways of improving the presentation of public sector pension plan information in the Public Accounts, starting with the 2013 Public Accounts.

## Conclusion

**3.73** Public debt and the associated interest charges consume a large amount of financial resources. They affect the government's fiscal strength, limit policy choices, and influence what we can afford as a nation. In this context, the interest-bearing debt needs to be managed and reported on properly. Clearer information allows for better policy debate, including debates on how to keep public finances sustainable.

**3.74** We found that the Department of Finance Canada has put in place a sound decision-making system to support and develop effective market debt strategies. The Department has introduced a debt strategy model that projects budgetary deficits or surpluses, associated interest charges, and budgetary risk. The model has allowed debt managers to design debt management strategies from a broader perspective on fiscal planning. The model and the supporting quantitative analyses are major advances that help debt managers identify sets of desirable debt structures. Also, the Department uses judgment and consults with market participants to support the government's debt management strategy.



**3.75** We found that the overall performance of the debt management strategy needs to be better monitored and reported on to inform management decisions. The Department uses indicators to monitor the performance of its debt management strategy against the government's objective of maintaining a well-functioning market for Government of Canada securities. The strategy is achieving this objective. By using more appropriate indicators, the Department can now better monitor the performance of this strategy against its other objective to raise low-cost and stable funding for the government by balancing the cost and risks associated with the debt structure. It has yet to demonstrate that the strategy is achieving this objective.

**3.76** The Department of Finance Canada publishes clear information on market debt. However, it should publish more details, such as how it justifies the debt management strategy or the overall performance of the program.

**3.77** We found that the Department has a sound risk management framework to measure and monitor risks and changes in financial requirements that could affect the debt management strategy. The Department has adequate processes to update and adapt the strategy. However, the Department needs to expand its marketing tools and promotional activities in order to reach a broader base of investors.

**3.78** Relative to other countries, Canada is a leader in reporting public sector pension plan liabilities in its financial statements. However, the information provided to parliamentarians and Canadians on the public sector pension plans is not easy to understand and is dispersed. Because funding the interest-bearing debt has an impact on the government's surplus or the deficit, complete and clear information on this debt should be reported. Clearer information would allow for better policy debates and choices. The reporting of forecasted interest charges in the Estimates needs to be improved in order to be more transparent. Finally, we noted that the Department does not have timely access to the interim information on the return of public sector pension investments in order to assess how unforeseen fluctuations could affect budgetary surpluses or deficits.



## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

### Objectives

The audit examined whether the Department of Finance Canada and the Treasury Board of Canada Secretariat, consistent with their respective responsibilities, effectively managed the interest-bearing debt of the Government of Canada. The audit had the following sub-objectives:

- to determine whether the Department implemented a sound decision-making system to support and develop effective market debt strategies,
- to determine whether the debt management strategy responded to emerging risks and changing funding requirements,
- to determine whether the Department assessed the performance of the debt management strategy by establishing objectives and monitoring performance as well as used performance results to support debt management decisions, and
- to determine whether the Department and the Treasury Board of Canada Secretariat reported comprehensive and clear information on the budgetary impact of the public sector pension plans.

### Scope and approach

The audit included the Department of Finance Canada and the Treasury Board of Canada Secretariat. At the Department of Finance Canada, we looked at the Financial Markets Division and the Fiscal Policy Division. At the Treasury Board of Canada Secretariat, we discussed issues with officials from the Pensions and Benefits Sector, the Expenditure Management Sector, and the Office of the Comptroller General of Canada. We also interviewed officials from the Bank of Canada and from the Office of the Chief Actuary.

The audit focused on the process used by the Department of Finance for selecting market debt strategies, for measuring performance, for managing risks that could have an impact on debt strategies, and for reporting information on the public debt. The audit also examined the information provided by the Treasury Board of Canada Secretariat and the Department of Finance Canada on the interest-bearing debt. More specifically, we focused on how interest charges are reported in the Estimates and how public sector pension plan liabilities are reported in order to inform parliamentarians and Canadians.

We reviewed various documents, including reports, minutes of meetings, analyses, research papers, as well as foreign reports, including guidance issued by international organizations. We also reviewed literature related to the interest-bearing debt. In addition, we interviewed debt managers in selected countries and consulted with experts in the field. We examined the market debt management activities carried out by the Department of Finance Canada from 1 April 2007 to 31 March 2011. We did not question the appropriateness of the debt management strategy or funding decisions. We examined practices for

reporting information on the interest-bearing debt at the Department of Finance Canada and the Treasury Board of Canada Secretariat that were in place as of 31 March 2011.

## Criteria

To determine whether the Department of Finance Canada implemented a sound decision-making system to support and develop effective market debt strategies, we used the following criteria:	
Criteria	Sources
The Department of Finance Canada performs analyses using quantitative tools (including modelling analyses) as well as qualitative information to establish trade-offs between costs and risks as well as to maintain liquid and well-functioning markets for Government of Canada debt.	<ul style="list-style-type: none"> <li>Guidelines for Public Debt Management, International Monetary Fund and World Bank</li> <li>Stockholm Principles, International Monetary Fund</li> <li>Developing a Medium-Term Debt Management Strategy (MTDS): The Analytical Tool User Guide, International Monetary Fund and World Bank</li> </ul>
The Department of Finance Canada ensures that the robustness of the quantitative analyses is assessed and challenges the projected results of funding scenarios.	<ul style="list-style-type: none"> <li>Departmental response to the Risk Management Report prepared for the Departmental Finance Canada</li> <li>Departmental response to the Evaluation of the Government's Decision to Target a Higher Fixed Rate Debt Structure, Department of Finance Canada</li> <li>Developing a Medium-Term Debt Management Strategy (MTDS): The Analytical Tool User Guide, International Monetary Fund and World Bank</li> </ul>
To determine whether the debt management strategy responded to emerging risks and changing financial requirements, we used the following criteria:	
Criteria	Sources
The Department of Finance Canada has a sound risk management governance framework for measuring and monitoring risks as well as changes in financial requirements that could have an impact on the debt strategy.	<ul style="list-style-type: none"> <li>Guidelines for Public Debt Management, International Monetary Fund and World Bank</li> <li>Stockholm Principles, International Monetary Fund</li> <li>Advances in Risk Management of Government Debt, Organisation for Economic Co-operation and Development</li> </ul>
The Department of Finance Canada has adequate processes to update and adapt the financial strategy when new risks emerge or when financial requirements change.	<ul style="list-style-type: none"> <li>Debt Management Strategy 2011–12, Department of Finance Canada</li> <li>Guidelines for Public Debt Management, International Monetary Fund and World Bank</li> <li>Stockholm Principles, International Monetary Fund</li> <li>Enterprise Risk Management—Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission</li> <li>Principles for Stable Capital Flows and Fair Debt Restructuring, Institute of International Finance</li> </ul>

To determine whether the Department of Finance Canada assessed the performance of the debt management strategy by establishing objectives and monitoring performance and whether it used performance results to support debt management decisions, we used the following criteria:

Criteria	Sources
The Department of Finance Canada establishes performance measurement mechanisms and targets to monitor the overall performance of the debt management strategy using metrics against the objectives set for the program.	<ul style="list-style-type: none"> <li>Guidelines for Public Debt Management, International Monetary Fund and World Bank</li> <li>Debt Management Performance Assessment (DeMPA) Tool, World Bank</li> <li>Advances in Risk Management and Government Debt, Organisation for Economic Co-operation and Development</li> </ul>
The Department of Finance Canada considers past performance results to update its debt strategy.	<ul style="list-style-type: none"> <li>Guidelines for Public Debt Management, International Monetary Fund and World Bank</li> <li>Debt Management Performance Assessment (DeMPA) Tool, World Bank</li> <li>Advances in Risk Management and Government Debt, Organisation for Economic Co-operation and Development</li> </ul>

To determine whether the Department of Finance Canada and the Treasury Board of Canada Secretariat reported comprehensive and clear information on the budgetary impact of the public sector pension plans, we used the following criteria:

Criteria	Sources
The Department of Finance Canada and the Treasury Board of Canada Secretariat publish accurate, complete, and clear information on the budgetary impact of the public sector pension plans.	<ul style="list-style-type: none"> <li>CICA Handbook, Canadian Institute of Chartered Accountants</li> <li>PSAB Handbook, Canadian Institute of Chartered Accountants</li> <li>Code of Good Practices on Fiscal Transparency, International Monetary Fund</li> <li>Manual on Fiscal Transparency, International Monetary Fund</li> <li>Best Practices for Budget Transparency, Organisation for Economic Co-operation and Development</li> </ul>

Management reviewed and accepted the suitability of the criteria used in the audit.

### Period covered by the audit

The audit covered the period from 1 April 2007 to 31 March 2011. Audit work for this chapter was substantially completed on 31 October 2011.

### Audit team

Assistant Auditor General: Nancy Cheng

Principal: Richard Domingue

Director: Philippe Le Goff

Johnathon Cziffra

Rose Pelletier

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).



## Appendix A Recent events that have had an impact on Canada's interest-bearing debt

**Policy changes for public sector pension plans.** In 1999, Parliament enacted the *Public Sector Pension Investment Board Act*, amending the *Public Service Superannuation Act*, the *Canadian Forces Superannuation Act*, and the *Royal Canadian Mounted Police Superannuation Act*. These acts are collectively known as the superannuation acts. The amendments came into force on 1 April 2000, and new funds were created for each plan (the pension funds) to receive all employee and government pension contributions made after that date. Hence, contributions and benefit payments for pensionable service accrued after 31 March 2000 are recorded in the pension fund accounts. An investment board—the Public Sector Pension Investment Board, or PSP Investments—was set up to manage the assets in the pension funds. Transactions such as contributions, benefits paid, and transfers that relate to service provided before 1 April 2000 are recorded in the superannuation accounts, which are credited with interest as though invested in a portfolio of Government of Canada long-term bonds (20-year and more) held to maturity. The average interest rate credited to the accounts was 6.7 percent in the 2009–10 fiscal year. In essence, the superannuation accounts are legislated ledgers and do not hold assets.

**New borrowing authority process.** Prior to 2007, the *Financial Administration Act* gave the government standing authority to refinance its market debt, while specific authority was to be granted by Parliament to undertake additional borrowing beyond an existing \$4 billion of non-lapsing borrowing authority. In the *Budget Implementation Act, 2007*, the \$4 billion limit was replaced by establishing borrowing authority under the Governor in Council that authorizes the Minister of Finance to borrow money. Annual borrowing limits are now approved by the Governor in Council. Parliament no longer has to approve the borrowing limits of the government. For 2011–12, the aggregate borrowing limit approved by the Governor in Council is \$300 billion.

**Consolidation of some Crown Corporations borrowings.** In 2008, the government consolidated the borrowings of three financial Crown corporations—the Business Development Bank of Canada, the Canada Mortgage and Housing Corporation, and Farm Credit Canada—into the federal debt program. As federal debt was rapidly declining, increasing the issuing of Government of Canada securities (a result of consolidated borrowing) was seen as a way to make the Government of Canada bond market more liquid. This approach was also aimed at reducing borrowing costs of the three corporations. According to the Department of Finance Canada, the consolidated borrowings of these Crown corporations have since grown to account for \$34 billion of federal market debt. This Crown borrowing activity does not affect the accumulated deficit (federal debt), since increased federal borrowing is matched by assets in the form of loans to the Crown corporations.

**Financial turmoil and stimulus measures.** During the second half of the 2007–08 fiscal year, financial markets were turbulent because of the sharp decline in the United States housing market and concerns about the creditworthiness of financial institutions. In January 2009, the federal government announced a series of measures to stimulate the economy. The Economic Action Plan totalled more than \$46 billion in new federal initiatives. The Extraordinary Financing Framework (EFF) initiative was created to make credit more available and to respond to gaps in credit markets so that credit restrictions would not deepen Canada's economic downturn. For example, the government provided more than \$69 billion in EFF

support to maintain the availability of long-term credit by purchasing mortgage-related securities. Because of the impact of the financial turmoil on revenues and expenditures, the government posted budgetary deficits of \$5.8 billion in 2008–09, \$55.6 billion in 2009–10, and \$33.4 in 2010–11.



## Appendix B List of recommendations

The following is a list of recommendations found in Chapter 3. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<p><b>Management of emerging risks</b></p> <p><b>3.51</b> The Department of Finance Canada should provide better financial information to market participants and expand its communication and marketing tools, as well as its promotional activities in order to reach a broader base of investors. (3.48–3.50)</p>	<p><b>The Department's response.</b> Agreed. The Department of Finance Canada's website contains a wide range of materials on Canada's borrowing programs, debt strategy, and economic and fiscal performance. The Bank of Canada's website also contains details on Canada's debt auctions. That said, the Department and the Bank plan to expand the range of economic, financial, and borrowing information available on their websites, provide better links between the two sites, and improve the organization of this information to make it more easily accessible. The Department recognizes the importance of maintaining and building on Canada's strong reputation in global capital markets and will take steps to increase its engagement with domestic and international investors as opportunities present themselves.</p> <p>In terms of expanding promotional activities, the Department would note that the investor base for Government of Canada securities has grown in recent years, that debt auctions have been well covered, and that Canada's global foreign-currency bond issues have met with very strong demand from international investors. Devoting significantly more resources to investor relations and associated promotional activities would not provide value for money.</p>

Recommendation	Response
<b>Reporting information on the interest-bearing debt</b>	
<p><b>3.57</b> The Department of Finance Canada should improve its reports on the market debt by including the analysis that supports the debt management strategy and information on the overall performance results against planned outcomes. These improvements will help better inform parliamentarians, Canadians, and investors on the actual results of the debt management strategy. (3.54–3.56)</p>	<p><b>The Department's response.</b> Agreed. Where feasible, the Department of Finance Canada will aim to improve the information content of our reports.</p> <p>We would note, however, that compared to its peers, Canada is already among the most informative in terms of its debt management reporting. The Debt Management Strategy and Debt Management Report are among the most transparent documents of the G20 countries with respect to describing the government's debt strategy as well as providing performance outcomes. New metrics have been added to recent reports. The Department also publishes external evaluations of debt management programs and operations conducted under the Treasury Evaluation Program. Additionally, a number of papers on Canada's stochastic debt strategy model are available on the Bank of Canada's website.</p>
<p><b>3.62</b> Given the magnitude of charges related to the superannuation accounts, the Treasury Board of Canada Secretariat and the Department of Finance Canada should improve the clarity of information on interest charges by separating, in the Estimates, the projected interest charges for the market debt from other interest charges in order to improve transparency. (3.58–3.61)</p>	<p><b>The Department's response.</b> Agreed. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to present a breakdown of interest and other costs in the Estimates.</p> <p><b>The Secretariat's response.</b> Agreed. The Department of Finance Canada will produce for the Estimates a breakdown of interest and other costs, starting with the 2012–13 Estimates, which the Treasury Board of Canada Secretariat will publish.</p>
<p><b>3.67</b> The Department of Finance Canada should seek interim information regarding the actual return of public sector pension plan investments in order to properly assess their impact on budgetary deficits or surpluses, as their potential impact on interest charges will grow with the size of assets. (3.63–3.66)</p>	<p><b>The Department's response.</b> Agreed. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to establish a process for the sharing of interim financial information regarding public sector pension plan investments.</p> <p>The Department would like to note, however, that it already has access to sufficient information to properly assess the impact of investment returns on the budgetary balance. As a result, the added value of this interim financial data is considered minimal.</p>

Recommendation	Response
<p><b>3.72</b> The Treasury Board of Canada Secretariat and the Department of Finance Canada should report, in a consolidated manner, clear and understandable information on the public sector pension plan liabilities (including supporting methodology and assumptions) and should explain their impact on the government's finances. (3.68–3.71)</p>	<p><b>The Department's response.</b> Agreed. The Public Accounts of Canada is intended to provide clear and understandable summary information on the government's public sector pension plan liabilities and their impact on the government's financial results. The Department of Finance Canada will work with the Treasury Board of Canada Secretariat to look at ways of improving the presentation of public sector pension plan information in the Public Accounts.</p> <p><b>The Secretariat's response.</b> Agreed. The Public Accounts of Canada is intended to provide clear and understandable summary information on the government's public sector pension plan liabilities and their impact on the government's financial results. The Treasury Board of Canada Secretariat will work with the Department of Finance Canada to look at ways of improving the presentation of public sector pension plan information in the Public Accounts, starting with the 2013 Public Accounts.</p>



Spring 2012

**Report of the Auditor General of Canada  
to the House of Commons**

**Message from the Auditor General  
Main Points—Chapters 1 to 5  
Appendix**

- CHAPTER 1** Border Controls on Commercial Imports
- CHAPTER 2** Replacing Canada's Fighter Jets
- CHAPTER 3** Interest-Bearing Debt
- CHAPTER 4** Non-Filers and Non-Registrants—Canada Revenue Agency
- CHAPTER 5** Oversight of Civil Aviation—Transport Canada
- CHAPTER 6** Special Examinations of Crown Corporations—2011



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Spring 2012

## Report of the Auditor General of Canada to the House of Commons

### CHAPTER 4

#### Non-Filers and Non-Registrants—Canada Revenue Agency



Office of the Auditor General of Canada



Spring 2012



## Report of the Auditor General of Canada to the House of Commons

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### CHAPTER 4

Non-Filers and Non-Registrants—Canada Revenue Agency



Office of the Auditor General of Canada

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Office of the Auditor General of Canada  
Distribution Centre  
240 Sparks Street  
Ottawa, Ontario  
K1A 0G6

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## **CHAPTER 4**

### **Non-Filers and Non-Registrants—Canada Revenue Agency**



## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance;
- gather the evidence necessary to assess performance against the criteria;
- report both positive and negative findings;
- conclude against the established audit objectives; and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.

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# Non-Filers and Non-Registrants— Canada Revenue Agency

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## Main Points

### What we examined

The Canada Revenue Agency works to ensure that Canadians pay their required share of taxes and that the revenue base is protected. It is responsible for administering the *Income Tax Act*, which specifies when taxpayers are required to file a return. A non-filer is an individual, a corporation, or a trust who fails to file a tax return as required by legislation.

Under the *Excise Tax Act*, businesses that meet certain criteria are required to register for the goods and services tax/harmonized sales tax (GST/HST). Non-registrants are businesses that fail to comply with this requirement.

The Agency, through its Non-Filer/Non-Registrant (NF/NR) program, works to encourage individuals, corporations, and trusts to comply with the filing requirement and, in the case of businesses, with the GST/HST registration requirements. In the 2010–11 fiscal year, the NF/NR program's salary budget was \$39 million of the Agency's total budget of \$4.5 billion, and it employed 700 of the Agency's approximately 39,000 employees. This relatively small program area generated \$2.8 billion of additional taxes, interest, and penalties assessed in each of the 2009–10 and 2010–11 fiscal years.

We looked at what the Agency has done to address non-compliance with filing and registration requirements. The audit focused on how the Agency identifies non-filers and non-registrants and how it plans, monitors, and reports on its actions to improve compliance.

Audit work for this chapter was substantially completed on 5 January 2012. Further details on the conduct of the audit are in **About the Audit** at the end of the chapter.

### Why it's important

Income tax is the single most important source of government revenue. For the income tax system to operate fairly and effectively, it is important that all individuals and corporations file returns when they are required by law to do so, and that they pay the taxes they owe. Not doing so reduces the amount of money available for important government programs such as health care, education, and the

environment. Similarly, businesses that are required to register for GST or HST but do not, may have a negative impact on government revenues. The Agency has identified non-filers and non-registrants as high priority issues to address, as part of its efforts to combat non-compliance, including the underground economy.

### What we found

- Because the Agency does not have the resources to pursue all non-filers, it has developed a risk scoring model to identify those it will pursue. Agency analysis indicated that the files it chooses to pursue result in returns filed and taxes assessed. However, it has not tested its screening to determine whether the files it chooses not to pursue from the initial 2.5 to 3 million files identified by the matching process should in fact be pursued. In addition, two thirds of the files initially selected for pursuit in the field are later determined to have low potential, and work on them is discontinued. In other words, the Agency does not know if its risk-scoring process is as effective as it could be.
- The Agency uses identification projects to find taxpayers who may be participating in the underground economy. The majority of projects completed were meeting or exceeding their targets for number of tax returns filed and amounts assessed.
- The Agency's planning process tends to repeat actions from one year to the next to identify non-filers and non-registrants. While it considers the cost of its processes to pursue these files when planning work, the Agency is not taking advantage of its research findings in its work plans in order to improve its results in achieving compliance.
- Current performance indicators focus on routine program activities—for example, tax dollars and the number of taxpayers assessed—rather than on the longer term impact of the program, in particular the Agency's success at getting non-compliant taxpayers to change their behaviour and file their returns. Various audits and program evaluations over the years have recommended action to develop additional performance measures and risk management of the Non-Filer/Non-Registrant (NF/NR) program and to improve its use of internal and external information. The Agency has made limited progress in implementing many of these recommendations.

**The Agency has responded.** The Agency agrees with all of the recommendations. Its detailed responses follow the recommendations throughout the chapter.



## Introduction

**Taxpayer**—According to the *Income Tax Act*, any person who resides in Canada, whether or not they are liable to pay tax. For tax purposes, a person may be an individual, a corporation, or a trust.

**4.1** The mission of the Canada Revenue Agency is to administer tax, benefits, and related programs and to ensure **taxpayer** compliance, on behalf of governments across Canada. As Canada's tax administrator, in addition to protecting Canada's revenue base, the Agency's primary goal is compliance—ensuring that taxpayers meet their obligations. Under the *Canada Revenue Agency Act*, the Agency is responsible for enforcing the *Income Tax Act* and the *Excise Tax Act*.

**4.2** As part of fulfilling that responsibility, the Agency has created the Non-Filer/Non-Registrant (NF/NR) program. The program's mandate is to encourage individuals, corporations, and trusts to comply with their requirements under the *Income Tax Act* to file tax returns as well as to encourage businesses to register for the goods and services tax/harmonized sales tax (GST/HST). The NF/NR program's stated objective is

to develop fair, responsible and effective strategies to achieve high levels of filing and registration compliance commensurate with the level of funding while generating a high return on investment (fiscal impact and production [returns obtained]).

**4.3** The *Income Tax Act* identifies situations that require individuals to file returns, which they must do to receive income tax refunds. Since many individuals are employees, and income tax is deducted at source from their pay, many receive refunds once they have filed their returns. Therefore, filing is in their best interest.

**4.4** Filing an income tax return is the first step in the compliance continuum. The Agency assesses taxes once a taxpayer has filed a return; if necessary, it may also assess taxes even if a taxpayer has not filed a return. Once the return is filed, if taxes are owed, a different compliance risk may arise—that of whether a taxpayer can or will pay the amount owed. Taxpayers may not file their returns for a variety of reasons. Some forget, some procrastinate, and others do not file their returns or do not report their income in an effort to avoid tax. The Agency provides tools to taxpayers to help them comply and, when necessary, intervenes with a variety of actions.

**4.5** An individual taxpayer is required to file a return when one of the following criteria is met:

- Tax is payable.
- The Agency requests or demands a return.

- The taxpayer has elected to split pension income with a spouse or common-law partner.
- The taxpayer wishes to receive the Working Income Tax Benefit.
- The taxpayer has disposed of capital property or realized a taxable capital gain.
- The federal government has overpaid Old Age Security or Employment Insurance benefits.
- The taxpayer owes money to a Registered Retirement Savings Plan (RRSP) because of the Home Buyers' Plan or the Lifelong Learning Plan.
- The taxpayer is required to contribute to the Canada Pension Plan.

Individuals, corporations, or trusts who do not file a tax return as required are called “non-filers.”

**4.6** The Agency administers benefits on behalf of other government departments as well as other levels of government. Often, these benefits are based on information in the income tax return. Unless individuals file a tax return, they cannot receive the benefits for which they may be eligible. The Agency aims to facilitate access to benefits, such as child benefits and the GST/HST credit, through its service delivery programs.

**4.7** In addition, under the *Excise Tax Act*, businesses must register for the GST or HST if they provide goods or services equivalent to \$30,000 or more each year. Charities must register after earning \$250,000 in revenue; for public service bodies, such as schools, universities, and hospitals, the threshold is \$50,000. Taxi drivers and certain non-resident businesses must register regardless of revenue. Businesses that should register but do not are called “non-registrants.”

**4.8** Approximately 700 of the Agency's 39,000 employees work in the NF/NR program. In the 2010–11 fiscal year, the program's budget was \$39 million of the Agency's total budget of \$4.5 billion. Compared to the other ways the Agency deals with compliance issues, such as audits and income tax collections, the program is relatively small. Despite its small size, the NF/NR program generated \$2.8 billion of additional taxes, interest, and penalties in each of the 2009–10 and 2010–11 fiscal years.

**Underground economy**—Typically involves commercial activity that is unreported for tax purposes. Underground economic activity is particularly prevalent in industry sectors where cash transactions are common, such as hospitality, automotive repairs, and construction, including home renovation.

Source: Canada Revenue Agency

**Organisation for Economic Co-operation and Development (OECD)**—An organization consisting of member countries. It conducts research and creates agreements, standards, and recommendations to end poverty through economic growth and financial stability. One of the OECD's focus areas is taxation.

**4.9** The Agency has identified the pursuit of non-filers and non-registrants as a high priority in its strategy to combat non-compliance, including the **underground economy**. The Agency's strategy incorporates

- research, to understand non-compliance;
- operations, to correct non-compliance through effectiveness and efficiency;
- communications, to promote voluntary compliance;
- legislative changes, when necessary; and
- partnerships with the **Organisation for Economic Co-operation and Development (OECD)**.

**4.10** The Agency recently reviewed the delivery model for its NF/NR program. The review looked at operational processes, workload management, and resource use to identify improvements that would result in better returns on investments for the program. In March 2011, the Agency summarized its findings, and it is currently reviewing the results.

### Focus of the audit

**4.11** The objective of the audit was to determine whether the Canada Revenue Agency adequately addressed filing non-compliance (non-filers) and registration non-compliance (non-registrants).

**4.12** We looked at how the Agency planned suitable methods to address both types of non-compliance, whether these plans incorporated past experience and research, and whether they took into account the cost of using these methods. We also looked at how the Agency validated its selection decisions and how well its projects addressed non-filing risks. Finally, we analyzed the way the Agency monitored and reported its actions toward non-filers and non-registrants. In all of these areas, we considered past audit and evaluation results, both internal and external, and recommendations the Agency had previously accepted.

**4.13** We did not focus on the issue of whether taxpayers are paying the taxes that had been assessed.

**4.14** More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations and Recommendations

### Identifying non-filers and non-registrants

**4.15** Most taxpayers in Canada file their tax returns on time. Others file late before Agency intervention. The Agency will assess interest and penalties for late-filed returns. If a tax return has not been filed, the Agency will start the non-filer process.

**4.16** There are two types of non-filers: known and unknown. Known non-filers are those that the Agency can identify. It does this by matching information slips (for example, T4 slips reporting employment income and T5 slips reporting investment income) filed by employers or other entities to tax returns filed by taxpayers.

**4.17** Unknown non-filers are those the Agency cannot identify through information slips or other documents. They are often self-employed or operate within the underground economy. Because there is little or no automated information about unknown non-filers and they are harder to find, they are at higher risk of going undetected than known non-filers.

**4.18** To start the identification process, Agency computer systems match information slips to personal tax returns to determine if a taxpayer has filed a return and if the amount reported is correct. Information slips that do not have matching tax returns identify potential non-filers. Each year, this process identifies 2.5 to 3 million individuals who are potential non-filers. Many are not determined to be non-filers, since they may not be obliged to file a return, or they may file their returns late. Another automated process identifies corporate non-filers by matching their corporate business numbers to corporate income tax returns.

**4.19** Once this initial matching process has identified potential non-filers, the Agency applies a risk-scoring process to select which taxpayers to pursue. The initial process for pursuing them is automated (Exhibit 4.1).

- The Agency sends letters, reminding them to file their outstanding returns.
- If the Agency does not receive a return within 40 days, it may send a second “request to file” letter or it may send a **demand to file**.
- Finally, if it has not received a return, the Agency may transfer the file to a tax centre or a tax services office where a staff member will begin a manual follow-up process. In some cases, the process ends with the prosecution of a taxpayer, resulting in a fine or jail term or both.

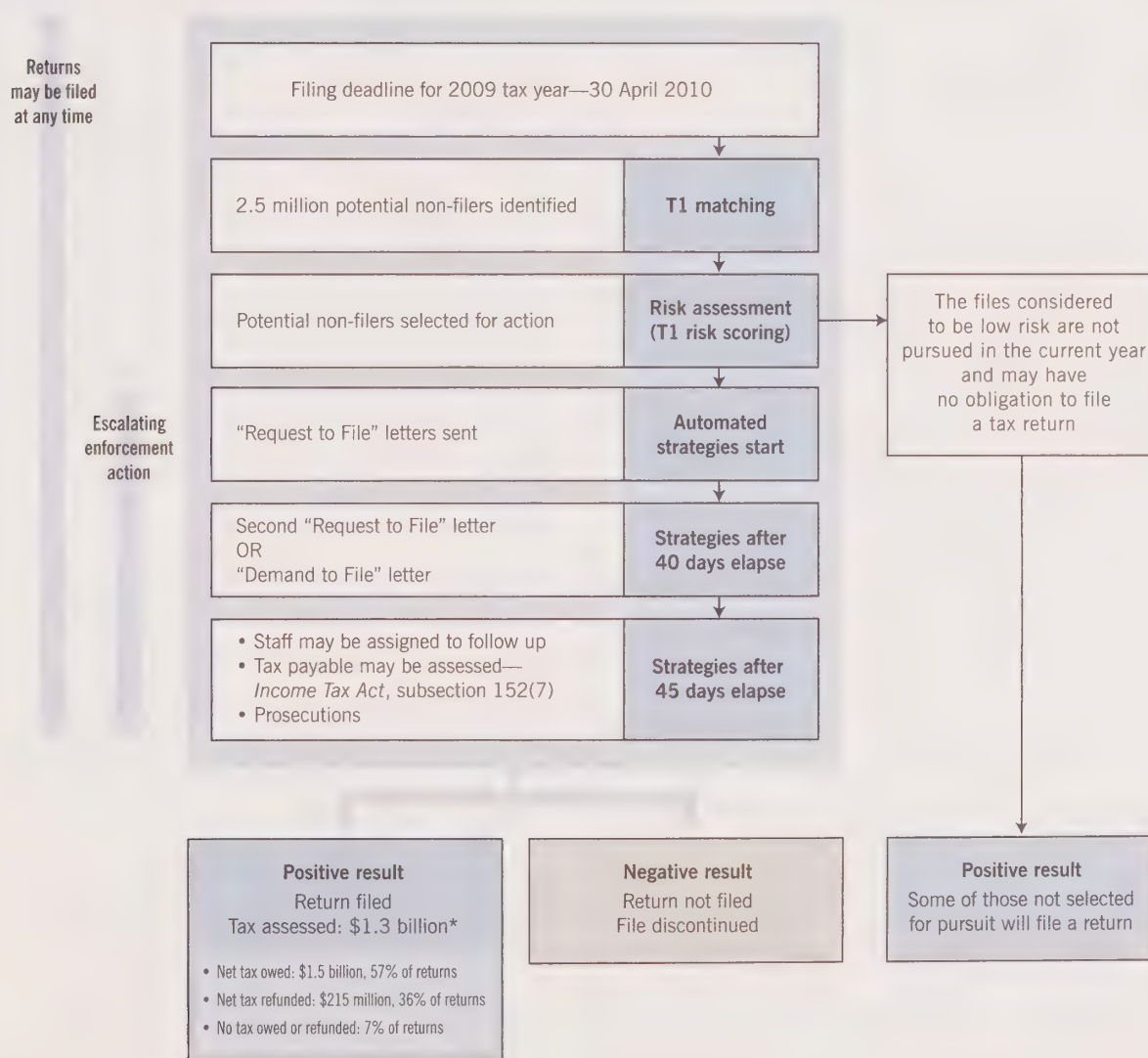
**Demand to file**—The formal notification of a taxpayer’s requirement to file an income tax return—based on subsection 150(2) of the *Income Tax Act*.



## The Agency has validated its process for selecting files but not for rejecting files

**4.20** We looked at whether the Agency validates (tests the validity of) its screening process for identifying non-filers, and whether it knows if the process was appropriate in identifying files to pursue. It is important to validate this process, because it could include (“screen in”) individuals who owe little or no tax or who are due a refund (low potential), and exclude (“screen out”) individuals who owe high amounts of taxes (high potential). For 2010 and 2009, we examined whether the Agency validated its screening process to confirm that it was excluding low potential files and including high potential files.

**Exhibit 4.1** Process for pursuing individual non-filers, using the 2009 tax year as an example

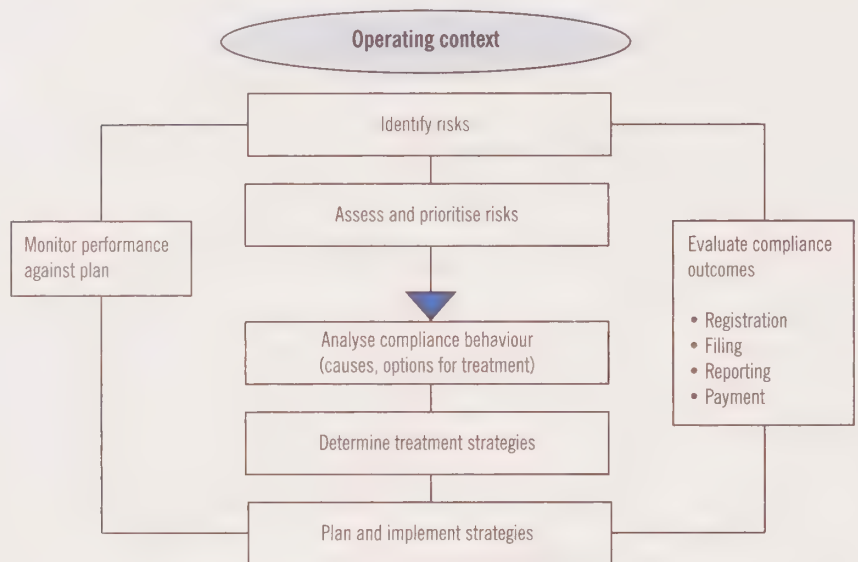


\*Total taxes assessed does not match the annual report, because this is the T1 process for individuals and does not include corporations, trusts, or GST/HST.



**4.21** According to guidance from the Organisation for Economic Co-operation and Development (OECD) on how to evaluate the effectiveness of an organization's strategies to encourage compliance, it is important to validate the process that the organization uses to select cases. This process is described in Exhibit 4.2. A flawed selection process could result in high costs and poor results, whereas sound selection processes result in low costs and positive results.

**Exhibit 4.2 The Compliance Risk Management Process**



Source: Organisation for Economic Co-operation and Development (OECD), Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies

**4.22** The individual (T1) risk-scoring process is designed to estimate the amount of tax that may be owed, on a case-by-case basis, using information available to the T1 matching process. The accuracy of that estimate can be validated only when the taxpayer files a tax return, and the actual amount of tax assessed can be compared to the estimated amount. One of the Agency's challenges is that it does not know how much tax, if any, is owed until it receives a return.

**4.23** We found that the Agency's analysis of its T1 file-selection process indicated it has some ability to predict the potential of the files from non-filers who were assessed after having been identified in the matching process. Risk scoring allows the Agency to prioritize returns with high potential. For the majority of cases, particularly when the file-selection process did not select a case for enforcement action, the Agency does not know how well its risk-scoring process works.

**4.24** The Agency's research does not provide a reliable estimate of the tax potential of the files that the Agency decided not to pursue. To get a reliable estimate of the potential of those files, the Agency could randomly select a small number of accounts from the 2.5 to 3 million individuals that are identified annually as potential non-filers. It could then develop baseline measures to determine the effectiveness of its risk-scoring process. The Agency has developed a new risk-scoring model for personal tax returns and has run pilot projects to test its effectiveness. This new model also does not address the potential in the files the Agency decided not to pursue. (Our recommendation is at paragraph 4.29.)

#### **The Agency needs to validate its process for registering potential non-registrants**

**4.25** The Agency's process for identifying potential GST/HST non-registrants involves matches, leads, projects, and previously identified non-filers. The Agency focuses on businesses that it believes ought to be registered but are not.

**4.26** Its work involving non-registrants uses approximately five percent of the NF/NR program resources. Agency guidance indicates that when an individual is being reviewed as a non-filer, staff must consider and act on GST/HST registration issues at the same time. We were unable to determine if this was being done consistently.

**4.27** We looked at businesses that were identified as potential non-registrants between 1 April 2009 and 31 March 2011, to determine whether the Agency validated its methods for pursuing non-registrants. We found two areas of concern:

- The Agency cannot manage the volume of potential non-registrants that its matching process identifies. Each year, this automated system identifies around 185,000 potential non-registrants and sends their files for review. The Agency has the capacity to review about half of these files. This means that a large number of potential non-registrants may not be reviewed on a timely basis.
- We also noted a file-selection issue. Given the volume of potential non-registrants identified, it is important for the Agency to select files according to their tax potential. While the current method includes elements of risk assessment, the Agency has not completed analysis that would allow it to determine the effectiveness of its file-selection method.

**4.28** In summary, the Agency does not know if its selection methods to pursue potential GST/HST non-registrants are effective. Given the Agency's limited resources, it is important to prioritize files to pursue.

**4.29 Recommendation.** The Agency should determine the effectiveness of both its file selection and rejection processes for the total population of potential non-filers and non-registrants.

**The Agency's response.** Agreed. The Agency will develop a methodology for determining the effectiveness of the file selection and rejection processes. It is expected that this methodology will be applied to the non-filer/non-registrant population in 2013–14; and, in 2014–15, the file selection and rejection processes will be adjusted, as required, based on the evaluation of the testing results from previous years.

#### **File selection for manual pursuit needs improvement**

**4.30** Once taxpayer files have gone through the automated process, and taxpayers have still not filed a return, the files are transferred to tax centres and tax services offices (collectively called “the field”) for resolution. Agency field staff will attempt to find current addresses for taxpayers, using the Internet and government databases. They may use a variety of methods—including phone calls, personalized letters, personal visits, and taxpayer lifestyle analyses—to achieve filing compliance.

**4.31** We noted that the Agency has been conducting research to find the optimal enforcement strategy for individual non-filers. Using data about filing history, the Agency has been trying to identify the non-filers that are highest potential and, as such, should be sent directly to the field, skipping the step of sending an automated letter. The Agency has piloted a new model based on this research, and the initial results are encouraging.

**4.32** When field staff pursue a file manually, the potential results are

- the taxpayer files a return;
- the Agency assesses the tax payable for the outstanding tax year, under **subsection 152(7) of the *Income Tax Act***; or
- the Agency discontinues pursuit of a return, because it determines that the file lacks revenue potential or that no return is required.

In some cases, the Agency may apply penalties or prosecute taxpayers. When it has successfully prosecuted a taxpayer, it issues a press release to inform the public of the consequences of not filing a return or not reporting income.

**Subsection 152(7) of the *Income Tax Act***—A provision of the Act that gives the Agency the authority to assess the tax payable where no return has been filed by a taxpayer. Agency staff calculate an amount they believe is an accurate estimate of a taxpayer's income. The taxpayer is able to revise the amount of tax assessed by filing a corrected income tax return.

**4.33** Guidance from the OECD states that tax authorities should ensure that they choose the correct files to pursue, and that they consider the cost of getting a non-filer to comply. We looked at

- how the Agency selects files to pursue manually,
- whether it evaluated the effectiveness of manual interventions, and
- how it addressed any shortcomings.

**4.34** Tax centres and tax services offices do not have the capacity to pursue every potential file transferred from the automated process. The Agency has identified an excessive inventory of non-filer cases at tax services offices as a significant challenge, so choosing which files to pursue is important.

**4.35** Field staff can use the amount of tax potential that the Agency estimates to select the potential non-filers that it pursues. They also have a number of other tools to help choose files. However, an Agency analysis, conducted as part of an NF/NR program renewal exercise, determined that the tax potential calculated by the Agency does not meet the field officers' needs. In addition, the analysis found the procedures used to select files at the tax services offices varied, as did the quality of the file selection. About two thirds of the files selected for manual pursuit ended up being discontinued, partly because the field staff determined low tax potential after they started to work on the file. When a file is discontinued, a decision is made to stop work on it, even if the taxpayer has not filed a return.

**4.36** A stronger risk assessment system would allow staff to prioritize and focus on files with high potential. It would also provide the Agency with the assurance that it can eliminate more low-potential files from its inventory and allow it to use its resources more efficiently and effectively.

**4.37 Recommendation.** The Canada Revenue Agency should implement a robust risk assessment system to prioritize its selection of files.

**The Agency's response.** Agreed. As noted in this report, the Agency's current effort towards improving file selection through data analysis is encouraging. The Agency is committed to developing and applying new risk assessment methodologies and business intelligence solutions to improve the selection of both low- and high-complexity files. The Agency will continue this work in 2012–13, so that a more robust risk assessment process can be implemented by 2015–16.



### **The Agency does not pursue all non-filing corporations**

**4.38** The *Income Tax Act* states that, unlike individuals, all corporations are required to file a tax return, whether or not they owe taxes. The Agency matches corporation business numbers to corporate tax returns. If there is no corresponding return, the corporation is a non-filer.

**4.39** We looked at whether the Agency ranks corporations for pursuit and excludes corporations based on predetermined criteria. We found that corporations are assigned a risk rating based on the estimated tax owing. However, the rating is for information purposes only; the Agency does not use that rating to select files to pursue.

**4.40** The Agency's administrative position is that it will not pursue certain types of corporations—such as incorporated municipalities and non-profit organizations—because they are exempt from income tax. Without tax returns for certain types of corporations, it is difficult for the Agency to determine if they still meet the conditions for tax exempt status.

### **Identification projects find non-filers for whom the Agency lacks information**

**4.41** The Agency has identified the underground economy as one of the biggest risks it faces. The combination of the declining economy and a growing number of self-employed individuals increases the risk of revenues going unreported and under-reported and of a reduced tax base.

**4.42** According to the Agency, identification projects are one of the ways that it identifies and addresses filing and registration non-compliance that is missed, or is not prioritized, by the automated process.

**4.43** These projects may be based on various factors, such as local knowledge and experience, regional concerns, and national issues. The focus of identification projects tends to be on self-employed individuals who carry on a business, because the Agency's automated systems address potential non-filers who receive information slips. For example, the Agency's automated matching process would not identify a contractor who offers a low "cash-only" price for renovations.

**4.44** Often, the research to identify which businesses to look at begins at a tax services office, where staff review a large number of businesses for filing compliance. As sources of information, they use the Internet and directory and database searches, as well as projects conducted at other field offices. They also seek information from other levels of government.



**4.45** The Agency's 2009 Risk Action Plan indicated the need for a more horizontal approach to enable a coordinated corporate strategy. Furthermore, it indicated that more research, testing, and analysis would be critical to help the Agency focus on high-risk industries and cases. The Agency's analysis of completed projects was to be finished by early 2011, but it remains outstanding. In addition, the Agency was to gather intelligence data, as part of its identification projects. Some work has been started, but more is still required to complete the intelligence gathering.

**4.46** We looked at identification projects completed between April 2009 and March 2011 to determine whether the Agency had adequate methods in place to find and compel non-filers to file their returns.

#### Examples of projects

In 2010, the Agency started a project that required a number of cities to provide a list of individuals and companies that had received revenues other than salaries. This would allow the Agency to check that the recipients' obligations under the *Income Tax Act* were being met. The information received from the cities would be matched against Agency databases. This would allow non-filers and non-registrants to be identified and pursued by field officers to file their returns and register their businesses.

Agency staff collected advertisements for home renovations and construction from publicly available sources, such as telephone directories, newspaper listings, flyers, and websites. This information was used to see whether those businesses filed returns and were registered for GST/HST.

**4.47** We found that the Agency undertook some projects during the audit period, but its choice of projects was not based on a comprehensive analysis of the types of non-filers it might be missing. The Agency's own analysis concludes project activity is *ad hoc* and has not benefited from a more systematic approach.

**4.48** We examined whether the identification projects achieved the desired results. We also considered whether the Agency cancelled or revised projects that were not meeting intended targets. We found that the majority of completed projects met or exceeded their desired results. However, we noted that one region was not consistently meeting its targets. The Agency has made efforts to address these issues at the regional level.

**4.49** Agency guidance on projects suggests that, when compared to other types of field work, identification projects find individuals with higher average amounts of taxes assessed. We looked at identification

projects and other field work, by comparing the ratio of salaries to assessed tax dollars, and we found no difference. This suggests that identification projects are no more successful in raising tax revenue than any other type of field work. However, they are important to the success of the program, because they find the unknown non-filers and send an important compliance message to taxpayers.

#### **Tax services offices rarely follow the new project approval process**

**4.50** Tax services offices are expected to spend a portion of their local budget on project work each year. They may also request additional funding for special compliance projects. In both of the years under audit, the Agency budgeted around 15 percent of its field salary dollars for identification projects.

**4.51** The Agency developed a project approval process, with a set of rules, for submitting potential projects for approval. It developed the process to ensure that it retained knowledge and experience obtained during identification projects, and to encourage more rigour at the local level when projects are being selected. For example, the process identifies the need for

- establishing a business case,
- performing sample testing,
- setting objectives,
- establishing a strategy,
- mapping the process, and
- having the project approved.

**4.52** We reviewed the applications for project approval by Headquarters, to determine whether Agency staff followed the new rules, which came into effect in July 2010. We found that most projects that were submitted lacked important information. The most common omissions were business case and sample testing, as well as approvals from local managers. These missing pieces of information are critical to demonstrate the need for the project as well as to assist in measuring its success. Without sample testing, it is difficult to determine the scope of the non-compliance staff are trying to address. Without approvals at the local level, managers may be unaware of any issues or may disagree with the scope and intent of the project.

## Planning work

**4.53** With a diverse population to identify and detect, planning becomes a key factor in the process of identifying non-filers. Assessing what worked in the past, incorporating lessons learned, and considering the results of research all play a part in developing a business plan. In addition, certain business sectors or geographic areas may be more problematic than others. The Agency needs to consider what to measure when developing a plan. To ensure success, the Agency must set appropriate standards in advance.

**4.54** The overall objective of the Non-Filer/Non-Registrant (NF/NR) program is to achieve high levels of filing compliance and registration. Managers need to know whether the Agency's programs and choices lead to desired changes in taxpayer behaviour, thus achieving this objective.

### The annual planning process focuses on production targets

**4.55** Guidance from the Organisation for Economic Co-operation and Development (OECD) refers to the importance of analyzing compliance behaviour, determining treatment strategies, and planning and implementing those strategies. Agency documents have identified non-filers and the underground economy as among the highest risks the Agency must address.

**4.56** We reviewed planning documents for the period between 1 April 2009 and 31 March 2011. We did not find an integrated plan that outlines the work of the NF/NR program as a whole. We saw budget documents, output targets, and emails. We found that, each year, the Agency used the same approach, which focused on obtaining a set number of tax returns or registrations and a target amount of assessed taxes. Because the Agency did not prepare and evaluate an integrated plan, it did not review the program's overall status.

**4.57** During the years under audit, the internal reports on the automated program production had an error in how production results were calculated. The Agency has informed us that controls are now in place to make sure that these reports are reliable.

**4.58** In our 2005 audit (November Report of the Auditor General of Canada, Chapter 3, Canada Revenue Agency—Verifying Income Tax Returns of Individuals and Trusts), we recommended that the Agency develop and implement a strategy to better use certain types of information returns, such as documents that report the sale of shares. This could be another useful source of information in the matching

process for identifying potential non-filers. The Agency agreed with this recommendation but has not yet fully implemented it.

**4.59** The NF/NR program has undertaken a long-term initiative to improve its operations. This initiative is based on an internal review of the Agency's offices across Canada, which is the foundation for change in areas such as risk management. It is an example of positive steps the Agency is taking, through the use of research, to improve its planning and program operation. This initiative is in the early stages of implementation, and it does not address past recommendations or other research agenda issues.

#### **The Agency considers the cost of achieving filing compliance when setting objectives**

**4.60** Risk management involves balancing risk with mitigation and takes into account the concept of diminishing returns. This requires the Agency to focus on obtaining compliance in cases where there is greater tax potential, and should consider what resources are necessary to achieve that level of compliance. We note, however, that the NF/NR program also recognizes the need to send a deterrent message to certain sectors, to encourage compliance.

**4.61** Cost-benefit analysis aids in selecting the appropriate approach to workload and general planning. We looked at the way the Agency considers this analysis when it sets objectives and again, throughout the year, when priorities or budgets change.

**4.62** We looked at Agency planning documents and found that, each year, it conducted a cost-benefit analysis before it began the automated and manual processes to assign non-filing and non-registration files. In fact, this concept was the foundation for many of the annual work plans.

**4.63** We reviewed three cases in which additional funds were injected into the program partway through the fiscal year. Agency documentation demonstrated that a clear cost-benefit analysis was conducted in only one of the three cases.

#### **Measuring results and making improvements**

**4.64** The Canada Revenue Agency's risk management policy, guidance from the Organisation for Economic Co-operation and Development (OECD), and non-filer/non-registrant (NF/NR) operations manuals highlight the importance of regularly learning from past experience, relevant research findings, and action plans for the purpose of continuous improvement.



**4.65** In addition to our 2005 audit, we conducted an audit of the NF/NR program in 1994 (Report of the Auditor General, Chapter 31, Revenue Canada—Ensuring Fairness of the Income Tax System: Detection of Non-Filers and Special Investigations).

**4.66** Some of the Agency's internal audit and evaluation reports also addressed the NF/NR program, including the following:

- 2005—Contract Payments Reporting System Program Evaluation Study
- 2007—Non-Filer/Non-Registrant Program—Internal Audit Report
- 2008—GST/HST Registration Compliance Evaluation Study

#### **Performance indicators measure only routine program activities**

**4.67** The OECD notes that revenue collection bodies (organizations that administer and enforce national tax laws) have traditionally measured their performance through the day-to-day activities that result from the various work streams they administer. However, while such measures represent an important part of revenue bodies' reporting systems and help with their day-to-day management, they do not offer insights into the impact of their activities. Positive trends are sometimes assumed to reflect improvements in taxpayers' compliance, but this may not be true. The Compliance Risk Management Process (Exhibit 4.2) links taxpayer behaviour to strategies. Strengthened performance monitoring would incorporate this concept and help the Agency to make this link.

**4.68** Previous audit and evaluation recommendations, which the Agency accepted, included the need for performance measures that provide more meaningful information. In our 1994 audit report on non-filers, we found that the focus on files obtained and taxes assessed did not provide information on whether taxpayer behaviour had improved. The Agency's 2008 GST Registration Compliance Study found that the yearly production targets that headquarters set for the NR workload

do not demonstrate the extent to which the program is having the desired effect of addressing registration non-compliance or identifying the relative risk posed by the non-registrant population.

**4.69** The Agency's 2007 Internal Audit Report concluded that its existing program performance measures are sufficient to assess routine program activities. However, according to the internal audit, the NF/NR



program needed to develop performance measures and indicators to accurately report its outcomes. Doing so would provide a complete performance picture of its portfolio to support the Agency's strategic decision-making.

**4.70** We reviewed published performance measures, as well as those available internally to Agency staff, for the two years under audit. We looked for the trend analysis and behavioural impact that were being incorporated into management information.

**4.71** We found that the Agency uses the following indicators to assess the program

- amount of taxes assessed,
- amount spent on salaries,
- number of returns filed, and
- number of GST/HST registrations obtained.

For the two years under audit, the NF/NR program exceeded its target of \$2.4 billion for taxes assessed; it assessed \$2.8 billion in each of the 2009–10 and 2010–11 fiscal years.

**4.72** The Agency also reports the rate of voluntary compliance in its Annual Report to Parliament, as a measure of the overall level of filing compliance in Canada. Individual filing compliance is quite high; in each of the years under audit, 92.8 percent of returns were filed on time, exceeding the target of 90 percent. Corporations are less compliant; the target of filing 90 percent of returns on time has not been met for a number of years (for example, 85.1 percent were filed on time for the 2010–11 fiscal year and 85.5 percent for 2009–10). (Exhibit 4.3)

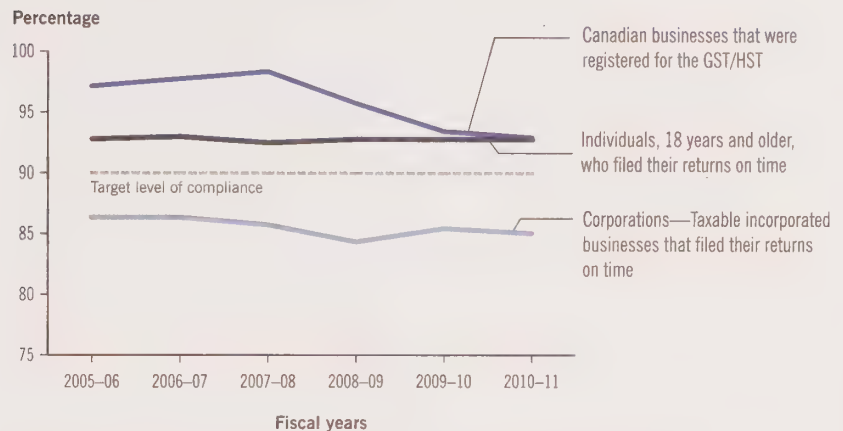
**4.73** In its annual report to Parliament for the 2008–09 fiscal year, the Agency committed to reporting the percentage of taxpayers that it identified as having outstanding tax returns after the Agency initiated an action. It did not report these percentages for the 2009–10 or 2010–11 fiscal years.

**4.74** The Agency does report annually on GST registration compliance. However, it reports this compliance as a percentage based on GST filing compliance, since the actual number is unknown. In our opinion, this is not a meaningful measure because there is no relation between those who file their GST returns and those who are not registered for GST. The Agency's annual report for the 2008–09 fiscal year indicated that the next report would include a percentage measure of the effectiveness of the actions that the Agency took to

identify businesses that are required to register for the GST/HST. No measure was included in subsequent annual reports.

**4.75** The Agency continues to struggle to develop measures that demonstrate its effectiveness in addressing filing or registration compliance.

**Exhibit 4.3 The Agency's target and compliance rates**



Source: Canada Revenue Agency's annual reports to Parliament, 2005-06 to 2010-11

**4.76 Recommendation.** The Canada Revenue Agency should follow through on its previous commitments to develop meaningful performance measures and indicators.

**The Agency's response.** Agreed. Performance indicators should evolve and adapt to changes in the program. Existing indicators continue to provide relevant information on program activities, expenditures, and results. New indicators, however, can provide even more meaningful information if the systems to collect and report on the data can be created. System changes will be governed by Agency and Government of Canada funding and expenditure policies. Beginning in 2012-13, the Agency will, in line with the Auditor General's recommendation, review the relevant performance indicators to ensure they further support program reporting requirements.

**The Agency has not integrated research results into planning to improve the program**

**4.77** The Agency has been conducting research on non-filer behaviour for many years. Understanding why certain taxpayers do not file their returns is essential to developing effective action plans.

The Agency has identified some actions it could take to increase non-filer compliance, such as changes to the contents of letters sent to non-filers (to be implemented for the 2012–13 fiscal year) and standard reminders from Agency staff when they respond to taxpayer queries about their obligations to file tax returns.

**4.78** We reviewed the Agency’s use of “data mining” (sifting through large amounts of data to find useful information) to improve the way it selects cases for non-filer enforcement action. One research project looked at the accuracy of the risk assessment when compared to the actual amount a non-filer declared on a tax return, regardless of Agency intervention. Overall, data mining shows promise.

**4.79** In 1994, we concluded that to conduct compliance research and generate more leads, which would help it to find non-filers who are not on the tax roll, the Agency needed to continue expanding its use of internal and external sources of information. We also concluded that the Agency needed to evaluate how effective it was at convincing non-filers to file tax returns.

**4.80** We looked at whether Agency enforcement action has an effect on voluntary compliance. While the Agency has not conducted any research about the effect of its NF/NR program on the Canadian public, its research on the non-filer population indicates that individuals who were subject to enforcement action were more likely to file their returns in future years. However, the impact fades over time, and future voluntary compliance is lowest among taxpayers who required more severe intervention, such as prosecution. This measure could be used to track the impact of the NF/NR program.

**4.81** We looked at Agency research about non-filers and non-registrants to determine whether any of the research findings had been integrated into the program planning during the period we audited.

**4.82** We found the Agency had a multi-year plan to conduct research, but it was not always clear how this plan fit into the NF/NR program’s overall plans. We saw no modifications to the annual planning process to incorporate research findings; the process was primarily a repeat of the previous year’s actions. An Agency’s program evaluation of GST/HST Registration Compliance, in 2008, noted similar concerns about risk and research.

**4.83 Recommendation.** The Canada Revenue Agency should include its research findings in its planning and reporting processes, to effectively manage the risk of non-filers and non-registrants.

**The Agency's response.** Agreed. The Agency has made significant progress in conducting research and gathering business intelligence through the acquisition of data, technology, and the Agency research agenda. The Agency recognizes that there are opportunities to improve how this intelligence is incorporated into the planning and reporting processes. By 2013–14, the Agency will develop and implement a formal process to achieve this goal.

## Conclusion

**4.84** The Canada Revenue Agency has adequately addressed non-compliance concerning the filing of tax returns and GST/HST registration, although we identified some areas for improvement. In particular, it does not know the impact of its actions on taxpayer compliance.

**4.85** The Agency has identified suitable methods to address filing and registration non-compliance. The planning process has some weaknesses, because it is not integrated with research and audit findings and tends to rely on past methods, although it does include the cost of applying particular methods.

**4.86** The Agency uses a risk-scoring model and data-mining research to choose files to pursue through an automated process, but it has no way of knowing whether it excludes the right files. Field staff use various methods to choose files, in addition to the automated risk-scoring system that does not always identify the files with the greatest potential for obtaining a tax return and assessing taxes.

**4.87** Identification projects successfully find non-filers about whom the Agency has no previous information.

**4.88** The Agency's performance measures do not provide information about the impact of the Non-Filer/Non-Registrant (NF/NR) program or on whether the program met its objective of achieving high levels of compliance. Rather, they measure the results of routine program activities. In addition, the Agency has made limited progress in implementing our previous recommendations or on those from its own internal audits and program evaluations. Overall, the NF/NR program works, but there is room for improvement.



## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

### Objectives

The overall audit objective was to determine whether the Canada Revenue Agency adequately addressed filing non-compliance (non-filers) and registration non-compliance (non-registrants). For the purposes of this audit, we defined “adequately” and “addressed.” Adequately meant in a measureable way, with targets and indicators reflecting the selection and identification process, and whether the Agency knew at each stage (at Headquarters and in tax services offices and tax centres) if the process was effective. Addressed meant concentrated on or directed its activities toward.

We conducted our audit with the following lines of inquiry, each with its own sub-objective:

- **Identifying, selecting, and pursuing non-filers and non-registrants.** To determine whether the approach to addressing non-filers and non-registrants was implemented as designed, at Headquarters and in the tax centres and tax services offices.
- **Planning.** To determine whether the Agency had designed an adequate approach to addressing non-filers and non-registrants.
- **Monitoring and reporting actions to address non-filers and non-registrants.** To determine whether the Agency monitored and reported its actions in addressing the inventory of non-filers and non-registrants.

### Scope and approach

The audit focused on the program areas concerning non-filers and non-registrants with the Taxpayer Services and Debt Management Branch. In particular, we looked at how they planned the work, used previous audit findings and research, and selected files, according to a risk assessment. We also considered how the Agency monitored and reported on the risk of non-filing and non-registration.

During our audit, we requested and reviewed documents and reports from the Agency. We also analyzed data relating to identification projects and file selection. Our review of applications for identification projects included the random sampling of 40 files over the two-year period of our audit. We chose our sample in accordance with statistical sampling methodology, to provide a high level of assurance that the Agency was following procedures when approving projects. A sample size of 34 is sufficient to project the entire population of 62 with an expected error rate of 0 percent, a confidence interval of +10 percent, and a confidence level of 90 percent.

To confirm our understanding of the information we received, we interviewed Agency staff at various levels and locations. We visited eight tax services offices, three tax centres, and one regional office and conducted interviews with regional program advisors, technical advisors, managers, field officers, team leaders, and



assistant directors. At the Agency's headquarters, we met staff in the Enterprise Risk Management Branch, Strategy and Integration Branch, and the Taxpayer Services and Debt Management Branch.

We did not examine Agency activities related to

- payment non-compliance,
- non-filing of GST (as opposed to non-registration), and
- criminal activities of the underground economy.

## Criteria

To determine whether the Agency had designed an adequate approach to address non-filers and non-registrants, we used the following criteria:	
Criteria	Sources
The Agency's plan identifies suitable methods to compel filing and registration compliance.	<ul style="list-style-type: none"> <li>• Corporate Risk Inventory Update, Canada Revenue Agency (CRA), 2010</li> <li>• Corporate Risk Inventory, CRA, 2009</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, Organisation of Economic Co-operation and Development (OECD)</li> </ul>
The plan incorporates past experience, relevant research findings, and action plans for the purposes of continuous improvement.	<ul style="list-style-type: none"> <li>• Enterprise Risk Management (ERM) Policy, CRA, 2006</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• Compliance Review II, CRA</li> <li>• Non-Filer/Non-Registrant (NF/NR) Tax Services Office (TSO) Operations Manual</li> </ul>
The Agency's plan compares the cost of applying the methods designed to mitigate the problem of non-filers/non-registrants with the benefit.	<ul style="list-style-type: none"> <li>• Enterprise Risk Management (ERM) Policy, CRA, 2006</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• Corporate Business Plan 2009–2010 to 2011–2012, CRA</li> </ul>
The Agency implements the work plan.	<ul style="list-style-type: none"> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• <i>Canada Revenue Agency Act</i></li> </ul>
The Agency identifies and selects inventory in a manner that takes into account the cost to achieve filing compliance.	<ul style="list-style-type: none"> <li>• Enterprise Risk Management (ERM) Policy, CRA, 2006</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• Corporate Business Plan 2009–2010 to 2011–2012, CRA</li> </ul>
The Agency validates its method to select inventory.	<ul style="list-style-type: none"> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> </ul>
The Agency has adequate methods in place to compel non-filers to file their returns and non-registrants to register their businesses.	<ul style="list-style-type: none"> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• <i>Income Tax Act</i></li> <li>• <i>Excise Tax Act</i></li> <li>• <i>Canada Revenue Agency Act</i></li> </ul>

To determine whether the Agency had designed an adequate approach to address non-filers and non-registrants, we used the following criteria: (continued)

Criteria	Sources
The Agency has measures to assess that its actions achieve the desired results as defined by the program objective.	<ul style="list-style-type: none"> <li>• Corporate Risk Inventory Update, CRA, 2010</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> <li>• NF/NR TSO Operations Manual</li> </ul>
The Agency reports whether its actions achieve the desired results as defined by the program objective.	<ul style="list-style-type: none"> <li>• <i>Canada Revenue Agency Act</i></li> <li>• <i>Auditor General Act</i></li> <li>• NF/NR TSO Operations Manual</li> <li>• Guidance Note: Evaluating the effectiveness of compliance risk treatment strategies, OECD</li> </ul>

Management reviewed and accepted the suitability of the criteria used in the audit.

### Period covered by the audit

The audit covered the period from April 2009 to March 2011. Audit work for this chapter was substantially completed on 5 January 2012.

### Audit team

Assistant Auditor General: Marian McMahon

Principal: Vicki Plant

Director: Heather Miller

Jeff Graham

Suzanne Moorhead

Rodney Newcombe

Stuart Smith

Sarah Winton

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).

## Appendix List of recommendations

The following is a list of recommendations found in Chapter 4. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<p><b>Identifying non-filers and non-registrants</b></p> <p><b>4.29</b> The Agency should determine the effectiveness of both its file selection and rejection processes for the total population of potential non-filers and non-registrants. (4.20–4.28)</p> <p><b>4.37</b> The Canada Revenue Agency should implement a robust risk assessment system to prioritize its selection of files. (4.30–4.36)</p>	<p>Agreed. The Agency will develop a methodology for determining the effectiveness of the file selection and rejection processes. It is expected that this methodology will be applied to the non-filer/non-registrant population in 2013–14; and, in 2014–15, the file selection and rejection processes will be adjusted, as required, based on the evaluation of the testing results from previous years.</p> <p>Agreed. As noted in this report, the Agency's current effort towards improving file selection through data analysis is encouraging. The Agency is committed to developing and applying new risk assessment methodologies and business intelligence solutions to improve the selection of both low- and high-complexity files. The Agency will continue this work in 2012–13, so that a more robust risk assessment process can be implemented by 2015–16.</p>
<p><b>Measuring results and making improvements</b></p> <p><b>4.76</b> The Canada Revenue Agency should follow through on its previous commitments to develop meaningful performance measures and indicators. (4.67–4.75)</p>	<p>Agreed. Performance indicators should evolve and adapt to changes in the program. Existing indicators continue to provide relevant information on program activities, expenditures, and results. New indicators, however, can provide even more meaningful information if the systems to collect and report on the data can be created. System changes will be governed by Agency and Government of Canada funding and expenditure policies. Beginning in 2012–13, the Agency will, in line with the Auditor General's recommendation, review the relevant performance indicators to ensure they further support program reporting requirements.</p>

Recommendation	Response
<p><b>4.83</b> The Canada Revenue Agency should include its research findings in its planning and reporting processes, to effectively manage the risk of non-filers and non-registrants. (4.77–4.82)</p>	<p>Agreed. The Agency has made significant progress in conducting research and gathering business intelligence through the acquisition of data, technology, and the Agency research agenda. The Agency recognizes that there are opportunities to improve how this intelligence is incorporated into the planning and reporting processes. By 2013–14, the Agency will develop and implement a formal process to achieve this goal.</p>





Spring 2012

**Report of the Auditor General of Canada  
to the House of Commons**

**Message from the Auditor General  
Main Points—Chapters 1 to 5  
Appendix**

- CHAPTER 1** Border Controls on Commercial Imports
- CHAPTER 2** Replacing Canada's Fighter Jets
- CHAPTER 3** Interest-Bearing Debt
- CHAPTER 4** Non-Filers and Non-Registrants—Canada Revenue Agency
- CHAPTER 5** Oversight of Civil Aviation—Transport Canada
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## Report of the Auditor General of Canada to the House of Commons

### CHAPTER 5

#### Oversight of Civil Aviation—Transport Canada



Office of the Auditor General of Canada



Spring 2012



## Report of the Auditor General of Canada to the House of Commons

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### CHAPTER 5

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Office of the Auditor General of Canada

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## **CHAPTER 5**

### **Oversight of Civil Aviation—Transport Canada**

## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance;
- gather the evidence necessary to assess performance against the criteria;
- report both positive and negative findings;
- conclude against the established audit objectives; and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.

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# Oversight of Civil Aviation— Transport Canada

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## Main Points

### What we examined

Aviation companies that want to operate commercially in Canada must obtain an authorization. In 2011, there were more than 5,000 companies authorized to operate and more than 34,000 aircraft registered in Canada. To maintain their authorization to operate, these companies must meet the minimum safety standards required for the safe conduct of civil aviation.

The minimum safety standards for aviation companies fall under the *Aeronautics Act* and the *Canadian Aviation Regulations*. The Act and the regulations form the main part of the regulatory framework for civil aviation. The overall responsibility for the maintenance of safe, regular, and efficient civil aviation operations, including the manufacturing and maintenance of aircraft, rests with the aviation industry.

Transport Canada is responsible for developing and administering the policies, regulations, and standards required for the safe conduct of civil aviation within Canada's borders. The Department is also responsible for overseeing whether aviation companies have complied with this safety framework, and for taking appropriate enforcement action where necessary. In 2009–10, Transport Canada spent over \$148 million and dedicated about 1,400 employees to monitoring civil aviation across Canada.

Our audit examined whether the Department has managed the risks associated with overseeing its civil aviation safety program. We focused on Transport Canada's surveillance of air carriers, aircraft maintenance organizations, and airports in the National Airports System.

Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Transport Canada plays a key role in helping to ensure that Canada's civil aviation safety framework meets minimum international safety standards. While Canada compares favourably with many other countries in its aviation safety record, any deterioration would significantly impact public confidence. This makes it critical that



Transport Canada maintain a robust and effective regulatory framework for civil aviation safety, especially since the International Civil Aviation Organization (ICAO) has projected a significant growth in aviation until 2025.

Identifying aviation companies that present safety risks is a highly complex process that relies heavily on the judgment and experience of Transport Canada's inspectors across Canada and on the information that is made available to them.

The Department's inspectors cannot be continuously present in all aviation companies to assess their compliance with aviation safety standards. Consequently, Transport Canada must use risk management techniques to decide where, when, how often, and in how much depth it inspects aviation companies in order to obtain sufficient assurance that they are complying with Canada's aviation safety requirements. If Transport Canada does not manage these surveillance risks well, it is unlikely to focus its scarce resources on aviation companies and operations that represent the highest risks.

### What we found

- Transport Canada has developed a rigorous aviation safety regulatory framework that is consistent with standards established by the International Civil Aviation Organization, but it can take a long time to address emerging safety issues—in some cases, more than 10 years. The Department has yet to fully implement a process that will address these issues more quickly.
- Since 2008, Transport Canada has made progress in evolving from the traditional surveillance approach—largely based on responding to regulatory requirements—to a systems-based approach designed for large and small aviation companies. This approach allows for more consistent and rigorous surveillance of aviation companies' compliance with safety regulations.
- While some aspects of the new surveillance program are working well, there are weaknesses in critical areas. For example, information for assessing the risk indicators that Transport Canada uses to identify the high-risk aviation companies that should be inspected is not always available or kept up to date. A minimum acceptable level of surveillance has not been clearly established to indicate how long aviation companies can operate without being inspected, and only two thirds of planned inspections have been carried out. Most inspections are not fully conducted according to established methodology and are subject to little management oversight.

In addition, documentation of key decisions is weak. Finally, Transport Canada lacks a quality assurance program to continuously improve its surveillance program.

- Transport Canada recently developed a national human resources plan for the oversight of civil aviation to help ensure that it has the resources it needs to carry out its safety regulatory program. However, the plan does not specify the number of inspectors and engineers that are needed, although the Department agreed to provide these figures in its response to our 2008 recommendation. The Department has made progress with implementing key human resources strategies, but efforts to fully implement the new surveillance approach have been hampered by the lengthy reorganization and by resistance from some inspectors.

**The Department has responded.** The Department agrees with all of our recommendations. Its detailed responses follow each recommendation throughout the chapter.



## Introduction

### Canada's civil aviation industry

#### Facts about aviation in Canada

- Canada's civil aviation industry employs more than 90,000 people.
- Canada has the second largest civil aviation aircraft fleet in the world and the second largest population of licensed pilots.

**5.1** In 2010, more than 75 million passengers flew within Canada's borders on nearly 3 million air flights. Statistics from the International Air Transport Association show that North America has one of the safest aviation industries in the world.

**5.2** In 2009 and 2010, the total number of accidents was the lowest recorded in a 10-year span in Canada (Exhibit 5.1). Large air carriers were involved in very few accidents between 2001 and 2010, and none of these accidents resulted in fatalities. These air carriers represent more than 95 percent of revenue-generating passenger miles travelled in Canada.

**5.3** Canada's civil aviation industry consists of six major sectors (Exhibit 5.2):

- airports and aerodromes,
- aeronautical product design and manufacturing,
- aircraft maintenance,
- air operations,
- air navigation services, and
- aviation personnel.

**Exhibit 5.1** Number of accidents between 2001 and 2010 involving Canadian-registered aircraft (travelling inside and outside Canada) and foreign air carriers in Canada

Type of air carrier	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Large Canadian air carriers	5	6	7	3	4	7	4	6	2	6
Small Canadian air carriers	93	100	95	80	89	97	91	88	70	79
Foreign air carriers	4	2	4	4	2	1	4	2	2	1
<b>Total</b>	<b>102</b>	<b>108</b>	<b>106</b>	<b>87</b>	<b>95</b>	<b>105</b>	<b>99</b>	<b>96</b>	<b>74</b>	<b>86</b>

Source: Transportation Safety Board of Canada—Statistical Summary, Aviation Occurrences 2010

**Exhibit 5.2** The sectors that make up Canada's civil aviation industry

Sector	Components
Airports and aerodromes	26 airports in the National Airports System, 544 certified aerodromes, and 1,775 uncertified aerodromes including water airports and heliports
Aeronautical product design and manufacturing	134 manufacturers 1,025 new and modified aeronautical products each year
Aircraft maintenance	1,852 approved maintenance organizations
Air operations	2,260 air carriers 34,833 registered aircraft 383 flight training units
Air navigation services	One service provider, 43 air traffic control towers, and other facilities
Aviation personnel	71,137 licences (pilots, flight engineers, and air traffic controllers) 24,000 industry delegates (to certify personnel or products on behalf of Transport Canada)

**5.4** The aviation industry itself has the primary responsibility for maintaining safe, regular, and efficient air travel. Aviation companies that want to operate commercially in Canada must obtain an authorization to operate. In 2011, more than 5,000 companies were authorized to operate in Canada, and more than 34,000 aircraft were registered in Canada.

**5.5** According to the International Civil Aviation Organization (ICAO), rapid expansion in the aviation industry is making it increasingly difficult to sustain a traditional approach to safety management, which primarily consists of responding to regulatory requirements. In early 2000, ICAO recommended that countries adopt a safety management systems (SMS) approach (Exhibit 5.3):

- **Background.** The concept of safety management systems originated in the early 1980s in the chemical industry. The concept emphasized the need to look at an overall process or system, including the combination of human, organizational, technical, and environmental factors, rather than individual occurrences. The goal was for organizations to move from a



reactive to a proactive approach by identifying hazards, analyzing associated risks, and taking appropriate measures before damage could occur. Over the years, the concept spread to other industries, including transportation.

- **Evolution.** Large civil aviation companies in Canada have put in place safety management systems, and large airports are transitioning to SMS. Each company must name an accountable executive to provide leadership and foster a safety culture, and then develop safety policies, procedures, training, and ways of managing quality assurance.

**Exhibit 5.3** Transport Canada is adopting a safety management systems (SMS) approach

Role	Traditional approach	SMS approach
Inspector	Inspectors are auditors of regulatory compliance.	Inspectors are system evaluators. As necessary, they may conduct traditional audits.
Company	The company responds to regulatory requirements.	The company proactively manages risks.

**5.6** Canada was the first country in the world to regulate the implementation of SMS in the aviation industry. Since 2008, Transport Canada has required air operators whose aircraft carry 20 passengers or more and their maintenance organizations (referred to as large civil aviation companies) to use SMS in managing their safety risks. For companies developing and implementing SMS, Transport Canada has provided information and help in interpreting the regulatory requirements.

### Transport Canada's oversight of civil aviation

**5.7** Transport Canada is responsible for the oversight of the civil aviation industry on behalf of the Government of Canada. Key elements of that responsibility include determining an acceptable level of aviation safety, and establishing a regulatory framework that sets out what the industry must do to achieve and maintain that level of safety. Transport Canada delivers certification services that authorize aviation companies and personnel to operate based on the requirements set out in the regulatory framework. Transport Canada also conducts surveillance activities of both aviation companies and their aviation personnel to assess whether they comply with the regulatory framework. This is done through inspections.

**5.8** Transport Canada has about 1,400 employees working in civil aviation. This represents one quarter of the Department’s workforce. Human resources are located in 10 offices across the country and at headquarters in Ottawa. In 2010–11, Transport Canada spent approximately \$148 million on civil aviation.

**5.9** The Department’s mandate for civil aviation derives from the *Aeronautics Act* and the *Canadian Aviation Regulations*. The Act and the regulations form the main pillars of the regulatory framework for civil aviation. Under the *Aeronautics Act*, the Minister has broad powers to inspect, audit, and enforce regulations related to any aircraft or airport, or any premises used for the design, manufacture, distribution, maintenance, or installation of aeronautical products.

**5.10** In 2005, when the *Canadian Aviation Regulations* introduced SMS, Transport Canada began to revise its surveillance activities to focus on measuring an organization’s ability to hold itself accountable for its own compliance. Transport Canada’s role became one of determining if a company’s safety systems complied with the regulatory framework (Exhibit 5.4). The Department also looked at how effective the company’s safety systems were. As necessary, it could conduct traditional audits.

**Exhibit 5.4** Transport Canada’s role has changed with the safety management systems (SMS) approach

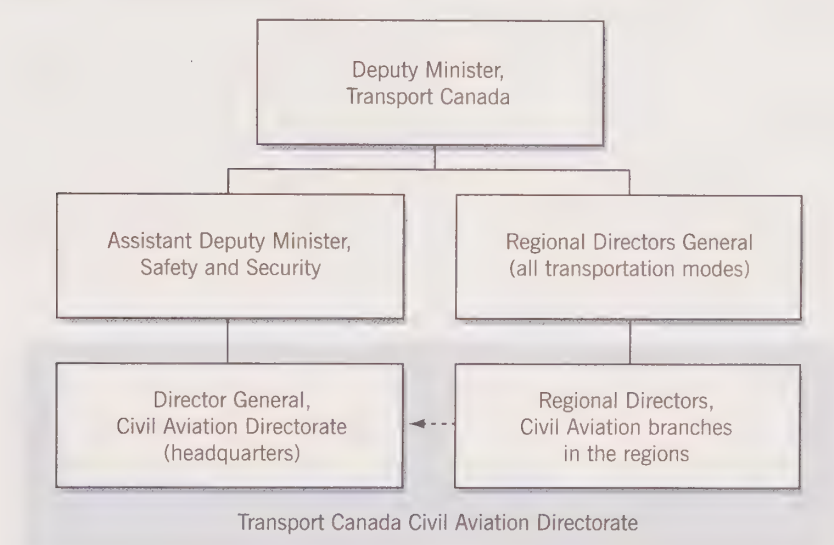
Traditional approach	SMS approach
Transport Canada inspects aircraft, records, and personnel directly.	Transport Canada assesses whether aviation companies have effective processes in place to ensure safety and verifies the company’s compliance with the regulatory framework. The surveillance within the SMS approach may involve traditional audits, as necessary.

**Organizational structure**

**5.11** Transport Canada carries out its responsibilities for civil aviation through the Civil Aviation Directorate at headquarters in Ottawa and through Civil Aviation branches in five regions. The Civil Aviation Directorate is part of Transport Canada’s Safety and Security Group. The Group’s responsibilities include the development of legislation, regulations, and national standards to promote safety and security in the areas of air, marine, rail, and motor vehicle transportation. Additional responsibilities in these areas include monitoring, testing, inspecting, and providing limited contribution programs.

**5.12** Headquarters is responsible for developing the content, policy, and standards for oversight activities. Regional Civil Aviation branches, along with the National Aircraft Certification Branch, the National Operations Branch, and the International Operations Branch at headquarters, carry out the oversight activities (Exhibit 5.5).

**Exhibit 5.5** Reporting structure for Transport Canada Civil Aviation Directorate



### What we found in our 2008 audit

**5.13** In our 2008 May Report, Chapter 3, Oversight of Air Transportation Safety—Transport Canada, we examined how the Department had managed the implementation of SMS for large air carriers and associated aircraft maintenance organizations, which were the first industry groups required to implement SMS. We found that Transport Canada’s management of the transition to the new approach had several weaknesses, including the following:

- In planning for the transition, the Department did not document risks, such as the impact of the transition process on oversight of air transportation safety, and did not identify actions to mitigate these risks.
- The Department did not measure the impact of shifting resources to SMS activities on the frequency of traditional oversight activities, which continued for smaller, non-SMS companies.
- The Department had not yet identified how many inspectors and engineers it needed, with what competencies, during and after the transition.

### Current challenge

**5.14** The ICAO has forecasted that air traffic volume will likely increase in North America by about four percent each year. This increase may more than double the current volume of air traffic in North America by 2025—the end of the forecast period. If nothing else changes, this increase in volume could lead to more accidents. The Department recognizes that it will have to do more just to keep the accident rate per revenue-generating passenger mile travelled in Canada at current levels. At the same time, Transport Canada believes that its current funding is not likely to rise significantly during that period. Consequently, maintaining the existing civil aviation accident rate in Canada will require that the Department effectively manage the risks associated with administering its air safety regulatory framework and oversight activities.

### Focus of the audit

**5.15** The focus of our audit was to determine whether Transport Canada has adequately managed the risks associated with overseeing its civil aviation safety program. Risks are inherent in air transportation. Eliminating accidents completely is unrealistic, and the Department will never have enough resources to ensure that every aviation company in the industry complies with all aspects of the safety regulations at all times. Therefore, it must use risk management techniques to choose what to inspect, when, and how often. It must also rely on properly trained staff to use the methodology and tools the Department provides them, as well as their knowledge, experience, and training, to identify what to inspect and to assess whether aviation companies are complying with the regulatory framework.

**5.16** Our audit focused on four aspects of Transport Canada's oversight program:

- First, we looked at whether Canada has a robust regulatory framework and whether it is responsive to emerging safety risks.
- Second, we looked at Transport Canada's planning of surveillance activities and whether they are being conducted according to methods in place for that purpose. We examined Transport Canada's surveillance activities of SMS companies, airports in the National Airports System (referred to as large airports), and small commercial air carriers and maintenance organizations. However, we did not examine Transport Canada's surveillance of other



sectors within the civil aviation industry, such as air navigation services, flight training units, general/private aviation, or personnel licensing.

- Third, we looked at whether Transport Canada has an appropriate human resources planning process to help ensure that it has the right number of human resources with the right competencies it will need to deliver aviation services and surveillance activities.
- Finally, we looked at whether Transport Canada has a sound plan to implement a quality assurance program.

**5.17** Our audit was not designed to conclude on whether air travel is safe. That is Transport Canada's responsibility. We also did not examine security issues, the efficiency of surveillance program activities, the Department's activities related to certification and licensing, or educational activities that can contribute to improved air safety. More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations and Recommendations

### Regulatory framework

**5.18** Transport Canada is responsible for establishing a regulatory framework to oversee civil aviation safety in Canada. The International Civil Aviation Organization (ICAO) has developed standards and recommended practices (SARPs) to help Canada and other member states meet their international obligations related to aviation safety oversight. The SARPs set minimum safety requirements for a consistent application throughout the world. In addition, Canada enters into bilateral agreements with its principal trading partners to harmonize safety standards between itself and these countries.

#### **Transport Canada has implemented a regulatory framework that is consistent with international requirements**

**5.19** We looked at the regulatory framework for civil aviation safety that was in place in 2011 to determine whether Transport Canada had implemented a suitable framework to meet its international obligations and to address emerging high safety risks. We also examined whether Transport Canada had kept abreast of new amendments to ICAO's international SARPs. We focused our work on what Transport Canada did to respond to amendments to international SARPs since 2005.



**5.20** We found that Transport Canada has a comprehensive regulatory framework that is consistent with ICAO requirements. In 2005, ICAO audited Canada's civil aviation regulatory framework and similarly concluded that it meets Canada's international obligations. The framework consists of three key components:

- The primary law in force is the *Aeronautics Act*, which establishes the Department's authority to control civil aviation activities in Canada.
- The *Canadian Aviation Regulations* set minimum legal requirements, such as those related to the safe operation of air carriers, aircraft, airports, and maintenance organizations.
- Transport Canada's standards set out criteria and conditions to provide the industry with a means of compliance and to help the industry understand how to fulfill Transport Canada's expectations for meeting a regulation. The Department also develops and uses other safety measures, such as educational activities.

**5.21** We also found that Transport Canada has put in place an adequate process to keep abreast of changes to international requirements. For example, it receives information regularly from ICAO about upcoming changes to SARPs and participates in several ICAO committees. ICAO senior officials said that Canada is a key participant in discussions about any proposed changes to international requirements.

**5.22** ICAO accepts differences related to the international SARPs when member states have determined that they are not able to implement them, have adopted another solution, or need more time to put the new requirements in place. When Canada does not implement some SARPs, it must inform ICAO of the differences. Documenting the rationale and sharing these differences with ICAO and with the aviation industry are important because this allows the industry to make informed business and safety decisions. Information on these differences is also helpful when Transport Canada negotiates bilateral agreements to harmonize safety standards with its main trading partners.

**5.23** We found that Transport Canada systematically compares Canada's regulatory framework with amendments to the SARPs. In 2010–11, Transport Canada analyzed 11 ICAO amendments to determine the potential impacts on Canada's regulatory framework and filed 63 differences. In all, Transport Canada has filed 178 differences to ICAO standards in the last five years. However, we found that Transport Canada has not effectively kept track of the rationale for these differences. In the absence of complete records,

it is difficult for Transport Canada to ensure that these differences will be considered in the regulatory process when the Department develops new regulations.

### **Transport Canada's process for addressing some emerging safety issues is lengthy**

**5.24** ICAO requires member states to have a process for the timely correction of safety issues. New and emerging risks can come from a variety of sources. For example, the Transportation Safety Board investigates accidents, reports publicly, issues safety recommendations, and raises high safety concerns. Nav Canada reports accidents and incidents, which are the basis of entries in the Civil Aviation Daily Occurrence Reporting System. As well, Transport Canada has a Canadian Aviation Issues Reporting System that allows the public and Transport Canada's employees to report safety concerns. We examined whether Transport Canada had a process in place to identify, analyze, and prioritize safety issues and emerging high risks, and whether it was addressing such risks in a timely manner.

**5.25** We compared emerging safety issues identified by key stakeholders with issues compiled by Transport Canada to assess whether the Department has an effective process for capturing this information. We found that Transport Canada's process effectively identified safety issues through consultations with the civil aviation industry and stakeholders, and through participation by Transport Canada officials in many national aviation industry groups.

**5.26** Transport Canada has the flexibility to determine whether safety issues will be best addressed using regulations or other safety measures, such as education, to promote aviation safety. According to the Department, the regulatory process is often not the most appropriate or cost-effective way to address or solve some emerging safety issues. We found that Transport Canada did preliminary analyses of issues and determined possible ways to resolve them. In most cases, the Department has analyzed practices in other countries. We also found that the Department has used tools such as videos, advisory circulars, and other means to alert and educate industry and the public about these safety issues and how to mitigate them.

**5.27** We found that Transport Canada has recently enhanced the criteria it uses to prioritize safety issues. These criteria include factors such as the potential impact on international harmonization and key findings from the Transportation Safety Board. Transport Canada then developed a work plan to address high-priority issues. However, we found that the Department has not shared its priorities with the

aviation industry and other key stakeholders, and that the time between identification of some safety issues and the date when they were finally addressed was long—in some cases, more than 10 years.

**5.28** We selected and examined four safety issues raised in past years by stakeholders: the state of Canadian runways (1999); pilot fatigue (2001); the testing of aircraft wiring and flammability (1999); and aircraft collision with land or water (1995). We recognize that many steps are required in addressing safety issues, such as consultations, analysis of complex regulatory options and their impact on industry and international harmonization, and the legislative process itself. However, addressing safety issues on a timely basis is critical. Transport Canada has not analyzed its process to determine how issues might be addressed more quickly. At times, key stakeholders have expressed concern that issues they brought to the Department's attention are not addressed quickly enough. Transport Canada's lengthy process to determine what measure is required to address safety issues may cause uncertainties in how the industry can respond to those issues.

**5.29 Recommendation.** Transport Canada should analyze its process for addressing safety issues raised by stakeholders to ensure that it acts in a timely way to address significant safety issues.

**The Department's response.** Agreed. By March 2013, the Department will have identified ways to accelerate follow-up on significant safety issues raised by stakeholders. The new process will continue to allow for consultation and regulatory changes.

## Surveillance planning

**5.30** The overall responsibility for aviation safety rests with the aviation industry. Even so, the International Civil Aviation Organization (ICAO) requires civil aviation authorities, such as Transport Canada, to adopt a systematic approach to verifying that aviation companies have effective systems for managing the safety of their operations. ICAO states that aviation companies should be subject to surveillance once every 12 months.

**5.31** Given the size of the aviation industry in Canada, yearly inspections would be impractical. Consequently, Transport Canada must rely on an effective, risk-based surveillance regime to get the assurance that the industry is complying with Canada's civil aviation regulatory framework. We focused our examination of Transport Canada's surveillance activities on its risk-based surveillance plans for 2010–11 and on the methodology it used for surveillance planning.

### **Risk-based planning lacks rigour**

**5.32** We looked at the information Transport Canada used in developing its 2010–11 surveillance plans. Our goal was to determine whether the Department had assessed the risk that aviation companies do not comply with the civil aviation safety regulatory framework, with a focus on high risks.

**5.33 Providing risk assessment guidance.** We found that Transport Canada’s surveillance methodology requires inspectors and management to consider risks in determining how often surveillance will occur. In 2009, Transport Canada developed standard risk indicators based on an analysis of risk indicators used by other international transportation authorities. These risk indicators help staff to identify aviation companies that may represent a higher risk for non-compliance with the regulatory safety framework. The standard risk indicators are comprehensive, covering important risks such as changes in key personnel, changes in operations, financial and labour difficulties, management practices, safety record, and other risk factors. However, Transport Canada’s methodology does not specify what information is to be used by inspectors in assessing a company against the standard risk indicators. For example, it is not clear what type of financial information should be used to assess the risk of a company being in “financial difficulty.”

**5.34 Assessing risk.** In our discussions with management and inspectors, we found that they considered risk indicators when assessing each company, but the way they did so varied significantly among industry sectors, aviation companies, and regions.

- For example, 75 large air carriers and maintenance organizations operate in Canada, including five very large companies that account for about 60 percent of revenue-generating passenger miles travelled. Transport Canada has assessed the risk indicators for the five very large air carriers and associated maintenance organizations. For the other 70 large air carriers and maintenance organizations, and about 4,000 small air carriers and maintenance organizations, the Department did not often use the standard risk indicators.
- Except for the assessment of risks for large airports in one region, there were no formal assessments for airports using the standard risk indicators when Transport Canada planned its 2010–11 surveillance activities.



**Risk profile**—A risk profile identifies

- key risk areas, risk assessments and tolerance, and an organization's ability and capacity to mitigate risks; and
- threats (through ongoing internal and external environmental scans, and analysis of risk information).

Source: Treasury Board of Canada Secretariat—Framework for the Management of Risk

Using the same indicators is essential to ensure that risk assessments across the country are consistent and that Transport Canada is targeting the right aviation companies for inspections.

**5.35 Compiling risk information.** Using up-to-date risk information in developing **risk profiles** is essential to targeting higher-risk companies. We found that Transport Canada collects up-to-date risk information and prepares risk profiles on the five very large air carriers and associated maintenance organizations in planning for inspections.

**5.36** However, for most large air carriers and maintenance organizations, for large airports, and for small air carriers and maintenance organizations, Transport Canada is missing key risk information and has no formal process in place to collect that data. Transport Canada collects a great deal of information, including information from previous inspections, companies' operating manuals, and incidents reported in the Civil Aviation Daily Occurrence Reporting System, as well as other information on companies that transport or handle dangerous goods. However, that information is stored in different databases and is difficult to access when regional civil aviation branches are assessing the risk indicators of these companies. In addition, Transport Canada has little or no information on some important risk indicators. For example, information on the financial situation of aviation companies is often not collected. As a result, decisions on risk-based planning are often based solely on the experience of the few inspectors involved with those entities in the past. With recent organizational changes to adapt to the safety management systems (SMS) approach and turnovers of inspectors, it is even more important to ensure that the risk information used in making planning decisions is complete and reliable. The problem is particularly acute with aviation companies and large airports that were not inspected in the previous year. Without complete and reliable risk profiles to conduct risk assessments, the Department may not inspect the aviation companies that present the highest risks to aviation safety.

**5.37 Recommendation.** Transport Canada should clarify what information on industry and aviation companies should be used in making risk-based decisions, collect that information, assess its completeness and reliability, and develop risk profiles when preparing annual surveillance plans in the regions.

**The Department's response.** Agreed. Transport Canada is committed to maintaining Canada's very strong civil aviation safety record. It has developed and begun implementation of a comprehensive action plan to guide the modernization of its structure and improvements to its



systems, processes, and tools, and to ensure that resources are targeted to areas of highest risk. The Assistant Deputy Minister of Safety and Security is accountable for the implementation of this plan, and its progress is being monitored by a senior management steering committee chaired by the Associate Deputy Minister. Successful and complete implementation of the plan is a priority for the Department.

By August 2012, the Department will complete and launch a standard risk assessment tool. The new tool is designed to collect information necessary to assess aviation companies and ensure consistency across all aviation enterprises, with regularly updated risk profiles to support a dynamic process of surveillance. These steps will improve the information base for the development of annual surveillance plans and overall surveillance activities.

### **Methodology for planning surveillance lacks clarity on the required minimum surveillance**

**5.38** For planning surveillance activities, Transport Canada must determine a minimum level of surveillance and manage its surveillance risks to an acceptable level. Setting clear minimum surveillance requirements for aviation companies is important if Transport Canada is to be sure that aviation companies are conducting safe operations, and if the Department wants to demonstrate that it is managing its surveillance risks. The safe conduct of operations is largely assured when companies comply with the terms of their authorization to operate. We looked at Transport Canada's 2010–11 surveillance plans and interviewed those involved in their preparation to determine whether the Department had respected its own planning guidance on how often individual aviation companies are inspected.

**National planning frequencies**—The Civil Aviation Directorate develops national planning frequencies for surveillance, as follows:

- SMS companies: an inspection every year—an assessment of the entire SMS every three years and a targeted inspection each of the other two years.
- Non-SMS companies: an inspection of key functional areas once a year.

**5.39** We found that Transport Canada has developed **national planning frequencies** that require aviation companies to be inspected annually. This requirement is consistent with ICAO standards. According to the Department's own planning methodology, inspectors are also required to consider risk information and availability of resources when developing their annual surveillance plans.

**5.40** We also found that although the national planning frequencies state that aviation companies must be inspected every year, about 70 percent of aviation companies across the country were not inspected in 2010–11. Transport Canada's planning frequencies also state that the decision to extend the frequency of surveillance beyond one year should be supported by a risk assessment. We found that management did not analyze and document its rationale for

postponing the planned annual surveillance. This practice is important to ensure that high-risk companies are inspected each year and that the correct level of management is aware of the decision to postpone the surveillance of high-risk companies and agrees with it. We also found that the planning methodology does not provide guidance on how long a company is permitted to operate without being inspected.

**5.41 Recommendation.** Transport Canada should clarify the minimum level of surveillance needed to provide the necessary coverage of civil aviation companies.

**The Department's response.** Agreed. By August 2012, Transport Canada will update and communicate to all inspectors and managers minimum surveillance levels for civil aviation companies.

## Surveillance activities

### Transport Canada has developed a standardized approach for consistent surveillance

**5.42** The International Civil Aviation Organization (ICAO) requires member states to provide guidance and tools to staff who perform oversight activities. In our 2008 report on Transport Canada's oversight of air transportation safety, we observed that Transport Canada had not explained how the day-to-day work of inspectors would change as activities related to safety management systems (SMS) were integrated with traditional oversight activities. Since 2008, Transport Canada has developed a new methodology for carrying out its surveillance activities. The methodology applies to all aviation companies authorized to operate and was designed to be flexible enough to apply to SMS companies as well as the other aviation companies. We looked at Transport Canada's surveillance methodology to determine whether it was adequate.

**5.43** We found that Transport Canada has developed a standardized surveillance methodology designed to promote consistent and rigorous inspections across Canada, and to make it possible for Transport Canada to determine a company's compliance with regulations. The methodology provides detailed staff instructions for routine surveillance (surveillance staff instructions SUR-001), as well as guidance and audit tools to carry out the surveillance.

**5.44** We examined the instructions to staff for conducting routine surveillance activities. We found that the instructions clearly define the Department's expectations, set out the roles and responsibilities of

key players involved in routine surveillance activities, and include key elements of good surveillance methodology for

- preparing and completing inspection plans,
- selecting sampling parameters,
- identifying procedures on how to conduct the inspection, and
- drafting reports and communicating inspection results to the aviation companies inspected.

**5.45** However, we found that the instructions lack the necessary tools to document the results of inspection work. As well, the instructions provide little guidance on the minimum documentation needed to support the key judgments made by inspectors in preparing, conducting, and reporting inspection findings. Finally, the instructions lack guidance about how management should be involved in reviewing those decisions and how their involvement should be documented. Having sufficient and appropriate evidence to support inspection findings and having documented management reviews would help to demonstrate that inspectors are following the methodology and that the desired level of assurance is being achieved.

**5.46 Recommendation.** Transport Canada should review its staff instructions to clarify its expectations on the minimum documentation required and the level of management involvement expected in the oversight of surveillance activities.

**The Department's response.** Agreed. By December 2012, the Department will have completed an update of, and communicated to managers and staff clear direction on, minimum requirements for surveillance documentation and management involvement.

### **Significantly fewer inspections are done than planned**

**5.47** Transport Canada's national planning frequencies require that the higher-risk companies be included in annual surveillance plans. We looked at the actual surveillance activities conducted in 2010–11 to determine whether Transport Canada had completed its inspections as planned. We found that only 67 percent of air carriers, maintenance organizations, and large airports were inspected according to annual surveillance plans.

**5.48** This result is significant because only the higher-risk companies are to be selected for inspection and included in the annual surveillance plans. If these plans constitute the minimum level of inspection that management believes is necessary to provide assurance that companies are complying with the safety regulations, then Transport Canada cannot have the assurance it says it needs. Even if more than the minimum number of inspections is planned, management still needs to assess whether, on the basis of the inspections done, Transport Canada has obtained an appropriate level of assurance.

**5.49** We were told that the main reasons for cancelling or postponing inspections were to reallocate resources to other higher-risk inspections, or because planned resources were not available. However, we observed that the rationale for moving resources from planned inspections to other work or to other inspections was not documented and was not approved by senior management. We also questioned why planned resources were not available in 2010–11. We found that Transport Canada had overestimated the time inspectors had available to conduct surveillance activities. We also found that the Department did not have accurate records on the time inspectors spent on various oversight activities. In the absence of such information, it is difficult for the Department to develop realistic surveillance plans for achieving a minimum level of surveillance activities.

**5.50 Recommendation.** Transport Canada should determine why a number of inspections are falling short of plans and take corrective action. Deviations from original plans should be documented, and they should be approved by senior management. Senior management should also determine whether Transport Canada is still obtaining the desired level of assurance that companies are complying with aviation safety regulations.

**The Department's response.** Agreed. Minimum surveillance levels will be reflected in surveillance plans from 2012–13 forward. Performance will be monitored on a regular basis, any deviations from approved levels will require respective Regional Director General and Director General Civil Aviation approval nationally, and senior management will be provided with regular updates.



### **Most inspections are not consistently conducted according to established methodology**

**5.51** Transport Canada inspectors are responsible for inspecting aviation companies against Canada's regulatory framework. This activity requires a good understanding of the methodology they must use to prepare for, conduct, and report on surveillance activities. The surveillance process relies on the judgment of Transport Canada's inspectors and on their training and experience to analyze and validate the safety systems and practices of aviation companies.

**5.52** We randomly selected and reviewed 74 inspection files completed in 2010–11. They included inspections of large and small commercial air carriers and maintenance organizations, as well as large airports. We reviewed these files to determine whether inspection teams had conducted their surveillance according to the established methodology. We did not examine the inspectors' judgments. Rather, we reviewed the documentation provided to us and met with Transport Canada inspectors.

**5.53** In our review of files, we found examples of good surveillance practices and documentation for inspections done at the larger aviation companies that concluded on the company's compliance to the regulatory framework. However, we found that most inspections were not consistently conducted according to the surveillance methodology. In discussion with inspectors, we often found that they did not fully understand how to apply the new methodology.

**5.54 Preparation for the inspection.** The instructions require inspectors to review key documentation and prepare an inspection plan, including a sampling plan, before they inspect aviation companies. This is important to ensure, among other things, that inspections focus on highest-risk areas and provide enough assurance that the company is operating within the regulatory framework.

**5.55** We found that inspection plans were prepared before the inspection work began, in about 35 percent of the files that we reviewed. These plans included some of the key elements, such as the scope of the inspection, the team members, the inspection schedule, and a list of interviews. However, we found little information on the key tests that had to be done to ensure that the inspection would focus on the greatest risks. We also found some information on sampling, but sampling plans were rarely prepared. In the absence of a sampling plan, Transport Canada may not know whether enough records were tested and enough interviews were conducted to conclude on the aviation company's compliance with the regulatory framework.



**5.56 Documentation practices.** Good file documentation is important to facilitate inspection reviews by management, to show that enough work has been done to support inspection conclusions on the aviation company's compliance with the regulations and to support any enforcement action that might be needed.

**5.57** In the files that we reviewed, we found that the inspectors had conducted interviews, reviewed records, analyzed documentation, identified issues, and concluded on whether the company was complying with the regulations. However, because there are no requirements for minimum documentation of work done and reporting of inspection results, the quality of the documentation varied significantly among inspectors and across regions. We found examples of documentation on interview strategies, the extent of company records reviewed, minutes of interviews, and actual company documentation reviewed and results of that review. However, this was not the case in most files.

**5.58** Staff instructions require inspectors to assess whether their findings are systemic and whether they could have a significant impact on safety. However, we found that these assessments were usually not documented. In some cases, the findings in the report were different from those on the inspection worksheets. In many other cases, findings on the worksheet were not included in the inspection report. Accurate and complete reporting of significant problems is key to helping aviation companies undertake corrective action to resolve them. As well, we found that Transport Canada had trouble locating key inspection documents, such as inspection reports. In several cases, when these documents were found, they were only in draft form. In our view, Transport Canada's documentation practices are weak and could be significantly improved.

**5.59 Recommendation.** Transport Canada should ensure that inspections are conducted and documented consistently according to established methodology. It should also consider whether existing documentation tools are sufficient or need to be redesigned or replaced.

**The Department's response.** Agreed. A review of tools and the launch of improved tools will be completed by December 2012. Guidance and new tools to improve documentation of inspections will be provided to staff as they are approved. This documentation will be reviewed regularly as part of Quality Assurance activities.

**5.60 Inspector training.** Inspectors receive a delegation of authority to act on behalf of the Minister in performing certain duties, and they must be trained accordingly. In 2008, Transport Canada agreed with our recommendation that a training strategy should be developed to

align with its human resources plan and address required competencies. In this audit, we looked at whether the required training had been provided to the delegated inspectors.

**5.61** We found that the mandatory training for all inspectors is identified in a departmental directive. It includes courses in support of the new surveillance approach, such as an introduction to the concepts and principles of SMS, proactive interview skills, an overview of quality assurance, and surveillance procedures. We also found that the Department has implemented a process to track the training provided to all inspectors. While this training covers most of the essential aspects of the inspectors' work, it does not include courses on working as a team—a theme that Transport Canada identified as important in the human resources plan that supports implementation of its new surveillance approach.

**5.62** By the end of March 2011, a majority of inspectors had received mandatory training on the concepts and principles of SMS, on proactive interview skills, and on quality assurance. However, at that time, only 40 percent of inspectors had been trained on the new surveillance methodology. As a result, we noted that many inspections were carried out in 2010–11 by inspectors who had not received this training. Completing the training on time is important to help inspectors understand and apply the new surveillance methods. Otherwise, the Department will not have the assurance it needs that aviation companies are complying with air safety regulations. At the end of our audit, more than 65 percent of inspectors had completed the training on surveillance procedures.

**5.63 Recommendation.** Transport Canada should ensure that all staff involved in inspections are trained in a timely manner so they can carry out their responsibilities.

**The Department's response.** Agreed. By July 2012, all current inspectors will have been given surveillance procedures training. There will be regular management reviews to ensure that mandatory training requirements continue to be met and that evolving training needs are addressed.

#### **Evidence of sufficient management involvement in surveillance activities is lacking**

**5.64** Staff instructions state that inspection plans and reports should be reviewed and approved by a supervisor. Management review of inspection plans and subsequent adjustments to the plans are particularly important given the need to focus scarce resources on the highest risks. Review is also important to assure management that

inspections were completed as planned and that the evidence collected supports the conclusions reached.

**5.65** However, we found that Transport Canada does not have a formal management review and approval process to assess the quality of inspections or compliance with the surveillance methodology. In most cases, we found that important planning decisions, such as inspection plans and the key judgments upon which they were based, had not been approved by management. We also found that while some inspection reports for larger aviation companies had been reviewed and approved by management, the practice itself and the extent of those reviews varied significantly among regions. The fact that the documentation of inspections is weak, that many inspectors still have not received the required training as of 31 March 2011, and that aspects of the approved methodology are not being followed points to a lack of management review and approval in overseeing the surveillance program.

**5.66** Transport Canada informed us that it plans to fully implement an integrated management system in 2013 to guide and support management decisions in civil aviation oversight. In developing such a system, it needs to provide for appropriate management involvement in surveillance activities.

**5.67 Recommendation.** Transport Canada should develop a clear expectation for appropriate management review and approval for planning, conducting, and reporting on surveillance activities to ensure that staff comply with established methodology. The nature, timing, and extent of that involvement should be documented.

**The Department's response.** Agreed. By June 2012, the Department will put in place a formal process to ensure appropriate management review and sign-off of surveillance reports.

## Human resources planning

**5.68** In our 2008 audit, we looked at whether the Department had enough inspectors with the right skills and competencies, in the right place at the right time, to carry out its mandate. We also looked at whether the Department had an integrated human resources plan for civil aviation that was aligned with its strategic plan. We focused our audit work on how Transport Canada was managing the transition to safety management systems (SMS) for the large aviation companies. We reported that Transport Canada had not yet identified how many inspectors and engineers it needed, with what competencies, during and after the transition. We also reported that the impact of SMS was being addressed in the reorganization of the Department's civil

aviation safety program, to be completed before the end of 2009. We issued three recommendations to strengthen human resources planning: to identify future staff needs; to implement recruitment and training strategies to meet those needs; and to restrict authority if inspectors did not take the required training. The Department agreed to implement our recommendations.

**5.69** In this audit, we looked at whether Transport Canada has adequately planned the human resources it will need to deliver its civil aviation safety oversight, and whether it had addressed our 2008 recommendations. We interviewed Transport Canada officials responsible for human resources planning; met with inspectors; and reviewed key planning documents, including the September 2011 transition plan for improving civil aviation safety, the 2009–12 national human resources plan for civil aviation, and the 2010 strategic plan for civil aviation. We also conducted interviews with senior management about strategies that were being implemented and their level of achievement, as outlined in the Human Resources Plan.

#### **Transport Canada has strengthened its human resources planning process**

**5.70** We examined the current human resources planning process to assess whether it was aligned with the approach recommended by the Treasury Board of Canada Secretariat. We also examined the resulting plan to determine whether it addressed the recommendation we made in 2008 that the plan should specify the number of inspectors and engineers and the competencies they would need.

**5.71** We found that the planning process followed by Transport Canada to prepare a human resources plan was consistent with the approach recommended by the Secretariat. It included an analysis of the civil aviation environment and priorities that are aligned with its strategic direction. The planning process involved extensive consultations among staff representatives at headquarters and in the regions and with senior management. It also took into account regional human resources needs.

**5.72** As a result of the planning process, the Department identified gaps in certain competencies and proposed strategies to fill these gaps. For example, Transport Canada has acknowledged that bringing together and better integrating inspectors' skills and knowledge are essential to achieving its objectives. Because most large aviation companies perform multiple activities like flight operations and maintenance, and have integrated systems and practices, inspectors are required to work more in multi-disciplinary teams that mirror the makeup of the aviation companies they regulate and oversee.



**5.73** However, while the Department identified some gaps in competencies in its human resources plan, it did not identify how many inspectors and engineers it will need to conduct inspections under the new surveillance approach envisioned by the plan. As we noted in 2008, it is important that the Department establish the number of resources it will need to achieve its strategic objectives and to develop an appropriate strategy to obtain them.

**5.74 Recommendation.** Transport Canada should identify the number of resources and the competencies it will need to plan and conduct inspections under its new surveillance approach, and develop a strategy to obtain them.

**The Department's response.** Agreed. The 2012–13 surveillance plan will be used to determine the number of resources and the competencies required by the Department. This information will inform updates to the national human resources plan for civil aviation, which will include strategies for recruitment and training.

**Progress has been made to implement human resources strategies, but a lot remains to be done**

**5.75** The human resources strategies to address the gaps in competencies identified in the Human Resources Plan include the rewriting of work descriptions, the reclassification of positions (including those of inspectors) to support the new organizational structure, the development of competency profiles, and the delivery of courses to address training needs. We conducted interviews with senior management and found that the Department has made important progress toward the implementation of its human resources strategies. For example, the Department has widely consulted with staff to design the new organizational structure and validate work descriptions for inspectors. It has also put in place a new organizational structure at headquarters and in the regions. However, addressing these issues is complex, and a lot remains to be done to fully implement the human resources strategies. Transport Canada still has to finalize job descriptions for about 55 percent of positions and the classification decisions related to them. In addition, at the time of our audit, the Department still needed to deliver training on the new surveillance methodology to 35 percent of inspectors. Although Transport Canada has made it a priority to speed up its progress in achieving these strategies, the six-year period it has taken to implement the reorganization and the ongoing resistance among some inspectors have hampered the Department's efforts to fully implement the new surveillance program.



## Quality assurance

### The Civil Aviation Directorate still does not have an approved quality assurance plan

**5.76** Transport Canada's 2008 Civil Aviation Directive requires that the Department plan and conduct internal quality assurance assessments within its directorate. An effective quality assurance program for evaluating Transport Canada's surveillance activities and oversight services would set high-level direction on quality expectations, would help management determine whether established methodologies are being followed, and would facilitate continuous improvement.

**5.77** In our 2008 audit, we reported that Transport Canada had no national mechanism for monitoring consistency in oversight activities or risk assessments. We recommended that Transport Canada establish a national mechanism to provide the desired level of assurance that policies, procedures, and processes for civil aviation oversight activities, including the assessment of risks, are followed consistently in all regions.

**5.78** While we were scoping this audit, Transport Canada told us that it had not yet implemented a quality assurance program. Based on this information, we focused our work on the lesser expectation that Transport Canada had an approved plan to implement an adequate quality assurance program to promote continuous improvement of civil aviation safety.

**5.79** We found that Transport Canada had briefly introduced some quality assurance assessments after our 2008 report, but put them on hold later that year to deploy resources elsewhere in the Department. We also found that Transport Canada conducted some quality control exercises, but these were limited to reviewing the quality of inspection reports in some regions.

**5.80** At the time of our audit, Transport Canada was working on terms of reference for developing its quality assurance plan. The Department stated that it would develop a national risk-based quality assurance plan by early 2012 and put quality assurance assessments in place by spring 2013. A properly functioning quality assurance program would help to identify the weaknesses we found in how the Department prepares for, conducts, and reports on its surveillance activities.

**5.81 Recommendation.** Transport Canada should develop a detailed quality assurance plan and make it a priority to implement a rigorous quality assurance program that is consistent with best practices.

**The Department's response.** Agreed. The Department is working on a rigorous quality assurance plan that reflects updated surveillance and

inspection methodology, which will be fully completed and implemented by March 2013. Results of quality assurance work will be used to improve the Department's work related to its oversight responsibilities.

## Conclusion

**5.82** Transport Canada has shown leadership in moving Canada toward a regulatory framework that includes a safety management systems (SMS) approach. Its actions were designed to promote civil aviation safety in Canada, with the objective of maintaining our good safety record into the future. As the first member of the international community to move to SMS, it faced significant challenges without the benefit of others' experience. Transport Canada has made progress in adapting its regulatory framework to one based on SMS and in developing a surveillance methodology that is in line with an SMS approach to civil aviation safety.

**5.83** We concluded that Transport Canada has implemented a suitable regulatory framework for civil aviation safety. The framework is consistent with Canada's international obligations, and the Department has the systems and practices necessary to improve it in response to emerging safety risks.

**5.84** On a program-wide basis, however, we concluded that Transport Canada is not adequately managing the risks associated with its civil aviation oversight. The significant weaknesses that need to be addressed involve how the Department plans, conducts, and reports on its surveillance activities. While we found examples where surveillance activities met our audit criteria, most inspection files that we reviewed fell short and did not follow Transport Canada's own established methodology. We found limited evidence of management review and involvement in surveillance activities. We also found that many fewer inspections are done than planned. This is significant considering that only the companies and the operational areas considered to be of higher risk are selected for inspection in any given year.

**5.85** We also concluded that Transport Canada has not adequately planned the human resources it will need to deliver its civil aviation safety program. It has developed a national human resources plan and made progress in implementing key human resource strategies, but it has not identified how many inspectors and engineers are needed to oversee civil aviation safety.

**5.86** Finally, we concluded that Transport Canada does not have an approved plan to implement an adequate quality assurance program that will promote continuous improvement of its civil aviation safety program.

**5.87** For decades, Transport Canada's approach to overseeing civil aviation safety remained unchanged. The Department faced challenges as the first nation to move to an SMS-based approach in the aviation industry. It has made real progress, with large aviation companies now working in the SMS regulatory framework. Transport Canada has revised its surveillance methodology so it is consistent with this new approach, and inspections are being carried out under its instructions. Senior management now needs to concentrate its efforts on ensuring that staff apply the approved methodology consistently and rigorously, that managers provide the necessary review and supervision, and that an effective continuous improvement program is put in place. Otherwise, Transport Canada will not have the assurance it needs that the industry is operating in compliance with the regulatory framework for civil aviation safety in Canada.

## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

### Objectives

The overall audit objective was to determine whether Transport Canada has adequately managed the risks associated with overseeing its civil aviation safety program.

The audit sub-objectives were

- to determine whether Transport Canada has implemented a suitable civil aviation safety regulatory framework;
- to determine whether Transport Canada has appropriately monitored the compliance of air carriers, maintenance organizations, and large airports against the civil aviation safety regulatory framework, with a focus on high safety risks and by using an adequate surveillance methodology;
- to determine whether Transport Canada has adequately planned the human resources it will need to deliver its civil aviation safety program; and
- to determine whether Transport Canada has a plan to implement an adequate quality assurance program to promote continuous improvement of civil aviation safety.

### Scope and approach

Our audit focused on branches in three regions and at headquarters that are involved in the delivery of Transport Canada's civil aviation safety program. We examined implementation of the regulatory framework and how Transport Canada was managing its risks related to its surveillance responsibilities.

We selected and reviewed significant safety issues and emerging high safety risks raised by stakeholders to assess how Transport Canada has monitored and responded to them.

We examined the information used for planning surveillance decisions and the process followed by Transport Canada for planning its annual surveillance activities in 2010–11. We also examined the methodology used by inspectors in 2010–11 for conducting planned surveillance activities. We randomly selected 74 inspection files from 2010–11 from SMS companies, airports transitioning to SMS, and small air operators and maintenance organizations. More specifically, we randomly selected the following in three regions:

- a representative sample of 52 of 375 inspection files for small air carriers and maintenance organizations,
- 6 large airports of the 10 airports in the National Airport System,



- 6 of 14 inspection files for large air carriers, and
- 6 of 13 inspection files of maintenance organizations.

At headquarters, we randomly selected 2 of 5 inspection files of very large air carriers and 2 of 5 inspection files of maintenance organizations.

Where representative sampling was used, sample sizes were sufficient to conclude on the sampled population, with a margin of error of 10 percent, 18 times out of 20. We did not examine the inspectors' judgments or their competency. Rather, we examined whether inspectors conducted surveillance activities according to the established surveillance methodology.

Finally, we looked at Transport Canada's plans for planning human resources and quality assurance activities.

We collected evidence through interviews with Transport Canada's officials at headquarters in Ottawa and at several regional offices. We met with representatives from the civil aviation industry to obtain an understanding of the industry.

We did not examine the safety or efficiency of the aviation industry.

## Criteria

To determine whether Transport Canada has implemented a suitable civil aviation safety regulatory framework, we used the following criteria:	
Criteria	Sources
Transport Canada has implemented a suitable civil aviation safety regulatory framework to address significant safety issues and emerging high risks in a timely manner.	<ul style="list-style-type: none"> <li>• Safety Oversight Manual, second edition, International Civil Aviation Organization (ICAO), 2006</li> <li>• Safety Management Manual, ICAO, 2009</li> </ul>
To determine whether Transport Canada has appropriately monitored the compliance of air carriers, maintenance organizations, and large airports against the civil aviation safety regulatory framework, with a focus on high safety risks and by using an adequate surveillance methodology, we used the following criteria:	
Criteria	Sources
Transport Canada has assessed the risk of non-compliance against the civil aviation safety regulatory framework, with a focus on high safety risks.	<ul style="list-style-type: none"> <li>• Safety Management Manual, ICAO, 2009</li> <li>• Framework for the Management of Risk, Treasury Board of Canada Secretariat, 2010</li> </ul>
Transport Canada has planned its risk-based annual surveillance according to its surveillance methodology.	<ul style="list-style-type: none"> <li>• Safety Oversight Manual, second edition, ICAO, 2006</li> </ul>
Transport Canada has conducted its surveillance activities according to established surveillance plans and methodology.	<ul style="list-style-type: none"> <li>• Safety Oversight Manual, second edition, ICAO, 2006</li> </ul>
To determine whether Transport Canada has adequately planned the human resources it will need to deliver its civil aviation safety program, we used the following criteria:	
Criteria	Sources
Transport Canada has developed a human resources planning process so that it has the appropriate number of qualified staff needed to deliver aviation services and surveillance activities.	<ul style="list-style-type: none"> <li>• Integrated Planning Guide, Treasury Board of Canada Secretariat, 2007</li> </ul>



To determine whether Transport Canada has a plan to implement an adequate quality assurance program to promote continuous improvement of its civil aviation safety program, we used the following criteria:

Criteria	Sources
Transport Canada has developed a plan to implement an adequate quality assurance program to promote continuous improvement of its civil aviation safety program.	<ul style="list-style-type: none"> <li>International Organization for Standardization ISO 9001, 2008</li> </ul>

Management reviewed and accepted the suitability of the criteria used in the audit.

### Period covered by the audit

The audit period examined was April 2010 to March 2011. Audit work for this chapter was substantially completed on 30 September 2011.

### Audit team

Assistant Auditors General: John Rossetti and Maurice Laplante

Principal: Régent Chouinard

Lead Director: Lucie Talbot

Directors: Chantal Thibaudeau and Nadine Cormier

Marie-Claude Dionne

Audrey Garneau

Michelle Gorman

Sophia Khan

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).

## Appendix List of recommendations

The following is a list of recommendations found in Chapter 5. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<b>Regulatory framework</b>  <b>5.29</b> Transport Canada should analyze its process for addressing safety issues raised by stakeholders to ensure that it acts in a timely way to address significant safety issues. (5.24–5.28)	<p>Agreed. By March 2013, the Department will have identified ways to accelerate follow-up on significant safety issues raised by stakeholders. The new process will continue to allow for consultation and regulatory changes.</p>
<b>Surveillance planning</b>  <b>5.37</b> Transport Canada should clarify what information on industry and aviation companies should be used in making risk-based decisions, collect that information, assess its completeness and reliability, and develop risk profiles when preparing annual surveillance plans in the regions. (5.35–5.36)  <b>5.41</b> Transport Canada should clarify the minimum level of surveillance needed to provide the necessary coverage of civil aviation companies. (5.38–5.40)	<p>Agreed. Transport Canada is committed to maintaining Canada's very strong civil aviation safety record. It has developed and begun implementation of a comprehensive action plan to guide the modernization of its structure and improvements to its systems, processes, and tools, and to ensure that resources are targeted to areas of highest risk. The Assistant Deputy Minister of Safety and Security is accountable for the implementation of this plan, and its progress is being monitored by a senior management steering committee chaired by the Associate Deputy Minister. Successful and complete implementation of the plan is a priority for the Department.</p> <p>By August 2012, the Department will complete and launch a standard risk assessment tool. The new tool is designed to collect information necessary to assess aviation companies and ensure consistency across all aviation enterprises, with regularly updated risk profiles to support a dynamic process of surveillance. These steps will improve the information base for the development of annual surveillance plans and overall surveillance activities.</p> <p>Agreed. By August 2012, Transport Canada will update and communicate to all inspectors and managers minimum surveillance levels for civil aviation companies.</p>

Recommendation	Response
<b>Surveillance activities</b>	
<p><b>5.46</b> Transport Canada should review its staff instructions to clarify its expectations on the minimum documentation required and the level of management involvement expected in the oversight of surveillance activities. (5.42–5.45)</p>	<p>Agreed. By December 2012, the Department will have completed an update of, and communicated to managers and staff clear direction on, minimum requirements for surveillance documentation and management involvement.</p>
<p><b>5.50</b> Transport Canada should determine why a number of inspections are falling short of plans and take corrective action. Deviations from original plans should be documented, and they should be approved by senior management. Senior management should also determine whether Transport Canada is still obtaining the desired level of assurance that companies are complying with air safety regulations. (5.47–5.49)</p>	<p>Agreed. Minimum surveillance levels will be reflected in surveillance plans from 2012–13 forward. Performance will be monitored on a regular basis, any deviations from approved levels will require respective Regional Director General and Director General Civil Aviation approval nationally, and senior management will be provided with regular updates.</p>
<p><b>5.59</b> Transport Canada should ensure that inspections are conducted and documented consistently according to established methodology. It should also consider whether existing documentation tools are sufficient or need to be redesigned or replaced. (5.51–5.58)</p>	<p>Agreed. A review of tools and the launch of improved tools will be completed by December 2012. Guidance and new tools to improve documentation of inspections will be provided to staff as they are approved. This documentation will be reviewed regularly as part of Quality Assurance activities.</p>
<p><b>5.63</b> Transport Canada should ensure that all staff involved in inspections are trained in a timely manner so they can carry out their responsibilities. (5.60–5.62)</p>	<p>Agreed. By July 2012, all current inspectors will have been given surveillance procedures training. There will be regular management reviews to ensure that mandatory training requirements continue to be met and that evolving training needs are addressed.</p>

Recommendation	Response
<p><b>5.67</b> Transport Canada should develop a clear expectation for appropriate management review and approval for planning, conducting, and reporting on surveillance activities to ensure that staff comply with established methodology. The nature, timing, and extent of that involvement should be documented. (5.64–5.66)</p>	<p>Agreed. By June 2012, the Department will put in place a formal process to ensure appropriate management review and sign-off of surveillance reports.</p>
<p><b>Human resources planning</b></p>	
<p><b>5.74</b> Transport Canada should identify the number of resources and the competencies it will need to plan and conduct inspections under its new surveillance approach, and develop a strategy to obtain them. (5.68–5.73)</p>	<p>Agreed. The 2012–13 surveillance plan will be used to determine the number of resources and the competencies required by the Department. This information will inform updates to the national human resources plan for civil aviation, which will include strategies for recruitment and training.</p>
<p><b>Quality assurance</b></p>	
<p><b>5.81</b> Transport Canada should develop a detailed quality assurance plan and make it a priority to implement a rigorous quality assurance program that is consistent with best practices. (5.76–5.80)</p>	<p>Agreed. The Department is working on a rigorous quality assurance plan that reflects updated surveillance and inspection methodology, which will be fully completed and implemented by March 2013. Results of quality assurance work will be used to improve the Department's work related to its oversight responsibilities.</p>











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## **Report of the Auditor General of Canada to the House of Commons**

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## Report of the Auditor General of Canada to the House of Commons

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### CHAPTER 6

#### Special Examinations of Crown Corporations—2011



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## **CHAPTER 6**

### **Special Examinations of Crown Corporations—2011**





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## Special Examinations of Crown Corporations—2011

6.1 This chapter presents the main points of special examination reports of Crown corporations that were issued to the corporations' boards of directors between 1 January 2011 and 31 December 2011 and that have subsequently been made public. These reports were transmitted throughout the year, and the respective systems and practices were examined during different time periods.

### Importance of Crown corporations

6.2 Crown corporations are distinct legal entities whose names, mandates, powers, and objectives are set out in either the constituent legislation for the parent Crown corporation or the articles of incorporation under the *Canada Business Corporations Act*. There are two types of Crown corporations: those that are wholly owned directly by the Government of Canada (parent Crown corporations) and those that are wholly owned by other Crown corporations (subsidiaries).

6.3 Crown corporations have more autonomy than most other government entities, in part, because they have commercial objectives as well as public policy objectives. They account for a significant portion of government activity and operate in many sectors of the Canadian economy, including transportation, energy, agriculture and fisheries, financial services, culture, and government services.

6.4 As of 31 December 2011, there were 46 parent Crown corporations and three subsidiaries that were directed to report as parent Crown corporations. These Crown corporations employed over 100,000 people. More than 83 percent of these employees worked at four corporations: Canada Post Corporation, Canadian Broadcasting Corporation, Atomic Energy of Canada Limited, and VIA Rail Canada Inc. The vast majority of Crown corporations had fewer than 3,000 employees. New Crown corporations are created periodically, but no new corporations were created in 2011.

6.5 Crown corporations manage more than \$375 billion in assets. Note that owing to the unique nature of their operations, total asset holdings for the Bank of Canada, the Canada Pension Plan Investment Board, and the Public Sector Pension Investment Board have not been included in the Crown corporations' total assets. Crown corporations fund their operations in a variety of ways. Some corporations are required by their enabling legislation to be financially self-sustaining and thus receive no parliamentary appropriations. Some are funded mainly through parliamentary appropriations. Others receive federal funding but also generate revenue. In the 2010–11 fiscal year, 27 corporations received just over \$6.7 billion in appropriations;

82 percent of these appropriations went to five corporations: Canada Mortgage and Housing Corporation, Canadian Broadcasting Corporation, Atomic Energy of Canada Limited, Canadian Air Transport Security Authority, and VIA Rail Canada Inc.

6.6 A board of directors or a similar governing body oversees the management of each corporation and holds management responsible for the corporation's performance. The board of a parent Crown corporation is, in turn, accountable to Parliament through the responsible minister.

## Role of the Office of the Auditor General

6.7 Under Part X of the *Financial Administration Act*, the Auditor General is appointed to conduct annual audits of the financial statements and periodic special examinations of Crown corporations, either on his own or jointly with a private sector audit firm, unless he waives the appointment.

## Definition and objective of a special examination

6.8 A special examination is an important accountability mechanism for Crown corporations. The objective of a special examination is to provide an independent opinion on whether there is reasonable assurance that a Crown corporation has systems and practices in place to ensure that its

- assets are safeguarded and controlled;
- financial, human, and physical resources are managed economically and efficiently; and
- operations are carried out effectively.

6.9 Any major weakness in the key corporate systems and practices that could prevent a corporation from achieving these objectives is reported as a **significant deficiency**. When planning special examinations, we conduct a risk analysis to identify the systems and practices that we consider essential to providing the corporation with this assurance. We also establish criteria that we use to examine the corporation's systems and practices. These criteria are based on our experience with performance auditing and our knowledge of the subject matter. They are selected in consultation with the corporation.

6.10 The opinion we present in the special examination can take one of three forms. First, we may find there is reasonable assurance that no significant deficiencies exist in the systems and practices the corporation maintains to achieve the objectives noted above. Second, we may find there is one or more significant deficiencies. Finally, in rare situations, we may find there is no reasonable assurance that a corporation's systems and practices achieve the objectives.

**Significant deficiency**—A major weakness in a Crown corporation's key systems and practices that could prevent it from having reasonable assurance that its assets were safeguarded and controlled, its resources were managed efficiently and economically, or its operations were carried out effectively.

6.11 The frequency of a special examination, as determined by the *Financial Administration Act*, is at least once every 10 years. However, special examinations could be carried out more frequently, if required by the Governor in Council (the Cabinet acting in a legal capacity), the appropriate minister, the board of directors of the corporation, or the Auditor General.

6.12 As part of the accountability mechanism for Crown corporations, the examiner reports on special examinations to the board of directors of a Crown corporation. Furthermore, the examiner may bring information from the special examination to the attention of the appropriate minister, after consulting with the board of directors. The examiner may also bring such information to Parliament's attention, after consulting with the appropriate minister and the board of directors, by preparing a report for inclusion in the next annual report of the corporation.

6.13 The *Financial Administration Act* requires that the board of directors submit all special examination reports to the appropriate minister and the President of the Treasury Board within 30 days of receiving them. The Act also requires that the board of directors make the reports available to the public within 60 days of receiving them.

### Special examination results for 2011

6.14 Reports were issued for the following three Crown corporations between 1 January 2011 and 31 December 2011, and have been subsequently made public:

- Canadian Dairy Commission,
- Canadian Race Relations Foundation, and
- Public Sector Pension Investment Board.

6.15 No significant deficiencies were identified in these special examination reports.

6.16 In addition, the special examinations highlight systems and practices that contribute to success, and they provide information and recommendations to boards of directors about other opportunities for improvement. For these three Crown corporations, our recommendations focused primarily on corporate governance, strategic planning, and risk management. Because of the small number of special examination reports issued during this period, it is difficult to identify overall trends.

6.17 Since 2008, we have been reporting annually on the special examinations transmitted in each respective year. Cumulatively, we have reported on 29 special examinations of which 8 had significant



deficiencies and 18 did not. As noted earlier, these reports were transmitted to the respective boards of directors on different dates during each year, and the respective systems and practices were examined during different time periods. No follow-up audit work regarding any of the matters raised in these reports has been performed.

**6.18** The next section provides the main points from each of the three special examination reports. Full reports can be found on each corporation's website.

## Main Points of Special Examinations—2011

### Canadian Dairy Commission—Main Points

*[We issued the full report to the board of directors on 16 March 2011. The examination work covered the period from March 2009 to August 2010. For the full report and our recommendations, please go to [www.cdc.ca](http://www.cdc.ca) or contact the Commission.]*

#### What we examined

The Canadian Dairy Commission is a Crown corporation established in 1966 to coordinate the federal government's and the provinces' policies and roles in managing the dairy industry in Canada. Acting as both a facilitator and a stakeholder in various forums that influence Canadian dairy policy, the Commission supports the interests of all dairy stakeholders—producers, processors, exporters, consumers, and governments.

The Commission has about 65 employees. The federal government funds approximately half of its administrative costs. Other costs, including marketing activities, are funded by dairy producers and the marketplace.

The Commission reports to Parliament through the Minister of Agriculture and Agri-Food whom it advises on matters related to the dairy industry.

We examined whether the Canadian Dairy Commission's systems and practices provide it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. Our examination focused on areas important to all Crown corporations, such as corporate governance, risk management, and strategic planning, and on areas of particular importance to the Commission, such as determining support prices and market-sharing quotas. Our examination covered the systems and practices that were in place between March 2009 and August 2010.

#### Why it's important

In 2009, dairy production in Canada generated total net farm receipts of \$5.5 billion and sales of \$13.6 billion, representing 15 percent of the Canadian food and beverage sector, according to the Canadian Dairy Information Centre. The Canadian Dairy Commission plays a key role in ensuring that Canadians have a continuous supply of milk and other dairy products available and seeks to ensure that efficient producers have the opportunity to obtain a fair return on their labour and investment.

**What we found**

We found no significant deficiencies in the Commission's systems and practices. A significant deficiency is reported when there is a major weakness in the Commission's key systems and practices that could prevent it from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed efficiently and economically, and its operations are carried out effectively.

We noted good practices in a number of areas. We also noted some areas where the Commission would benefit from improving its practices.

- The Commission has the key elements of an effective governance framework in place. The Board assumes stewardship of the Commission and works closely with management. Roles and responsibilities are clearly defined and understood, and the Board is supported by a simplified subcommittee structure. Some issues raised in our 2005 Special Examination Report have not been resolved—namely, it is difficult for the three-person Board to have the full range of skills needed for governance, and the Board does not have a process for directors to declare and manage conflicts of interest.
- The Commission manages its key operational functions well. Its practices for determining support prices and market-sharing quotas are consistent with its legislation and objectives. It also has systems and practices in place for protecting its inventory of butter and skim milk powder and for issuing permits under the Special Milk Class Permit Program.
- The Commission's management of human resources provides it with the core competencies and skills it needs as a small Crown corporation. It has recognized the need for succession planning. The work to prepare for future retirements is ongoing.

**The Commission has responded.** The Commission agrees with our recommendations.

## Canadian Race Relations Foundation—Main Points

*[We issued the full report to the board of directors on 16 September 2011. The examination work covered the period from November 2010 to April 2011. For the full report and our recommendations, please go to [www.crr.ca](http://www.crr.ca) or contact the Foundation.]*

### What we examined

The Canadian Race Relations Foundation is a Crown corporation founded in November 1997. It was created as part of the 1988 Japanese–Canadian Redress Agreement, which acknowledged that the treatment of Japanese–Canadians during and after World War II was unjust and violated principles of human rights. Under the terms of the Agreement, the federal government promised to create a Canadian Race Relations Foundation.

The Foundation's operating income is derived primarily from the income earned by investing a one-time \$24 million endowment fund established by the Government of Canada when the Foundation was created. The *Canadian Race Relations Foundation Act* requires that the endowment itself be used solely for investment.

The Foundation reports to Parliament through the Minister of Citizenship, Immigration and Multiculturalism. It is governed by a board of directors and has six employees; its office is in Toronto. The Foundation's activities are mainly outreach and awareness activities, which are intended to contribute to the elimination of racism and racial discrimination. They include media events, use of social media tools, award, and education and training programs.

We examined whether the Canadian Race Relations Foundation's systems and practices provide it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. In this first special examination of the Foundation, we focused on the areas of governance, strategic planning and risk management, investment management, and operations. Our examination covered the systems and practices that were in place between November 2010 and April 2011.

### Why it's important

The Foundation's mandate, as specified in the *Canadian Race Relations Foundation Act*, is to facilitate the development, sharing, and application of knowledge and expertise throughout Canada in order to contribute to the elimination of racism and all forms of racial discrimination in Canadian society. The Foundation supports the federal government's commitments and responsibilities under the

International Convention on the Elimination of All Forms of Racial Discrimination and under Canadian law for equal participation in Canadian society and the elimination of discrimination.

### What we found

We found no significant deficiencies in the systems and practices of the Canadian Race Relations Foundation. We noted good practices in a number of areas, and we also noted some practices that the Foundation would benefit from improving.

- The Foundation's Board of Directors has most of the elements necessary for effective governance. The Board's roles and responsibilities and those of the executive director are clearly defined, and the Board provides management with strategic direction and oversight. The Board has developed an effective working relationship with management, and has practices in place to maintain its independence. However, the Board competency profile has not been updated since March 2009, and that profile did not reflect the specific skills and experience required on the Board. In particular, the profile did not identify the extent of investment management expertise the Foundation needs to oversee the portfolio that provides the majority of its income.
- The Foundation has most of the elements necessary to manage its investment portfolio. Its investment policy includes all the key elements necessary to guide the Foundation's investment strategy, and the activities of three fund managers are overseen by an investment advisor and the Board. However, management and the Board need more complete performance information to better monitor the investment portfolio.
- The Foundation's strategic planning process sets clear direction for its operations. Planning of activities is mainly done through the development of the business plan, which aligns the activities with the Foundation's strategic plan and mandate, and includes information that allows them to be monitored by management and the Board. The Foundation also identified its major organizational risks and developed action plans to mitigate them, which management started to implement. However, there has been no review of the actions taken or their effectiveness in mitigating the risks.

**The Foundation has responded.** The Foundation agrees with all of the recommendations.



## Public Sector Pension Investment Board—Main Points

*[This examination was jointly completed with Deloitte & Touche LLP. We issued the full report to the board of directors on 12 May 2011. The examination work covered the period from June 2010 to November 2010. For the full report and our recommendations, please go to [www.investpsp.ca](http://www.investpsp.ca) or contact the Corporation.]*

### What we examined

The Public Sector Pension Investment Board (PSP Investments or the Corporation) is a Crown corporation created to invest the pension contributions (net of benefit payments made) of the Public Service, Canadian Forces, Royal Canadian Mounted Police, and Reserve Force pension plans (the Plans). Its mandate is to manage and invest these funds in the best interests of the contributors and beneficiaries, with a view to achieving a maximum rate of return, without undue risk of loss, having regard to the funding, policies and requirements of the pension plans.

We examined whether PSP Investments' systems and practices provide the Corporation with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. We focused on the areas of governance, risk management, strategic planning, performance measurement, investment management, human resource management, and information technology management. Our examination covered the systems and practices that were in place between June 2010 and November 2010.

### Why it's important

Net contributions from the plan members and sponsors which are transferred to PSP Investments represent an important portion of the assets which will serve to pay benefits of plan members upon their retirement. Ineffective systems and practices could lead to diminished returns and erosion of capital, potentially compromising the plans' ability to meet their financial obligations.

### What we found

We found no significant deficiencies in the Corporation's systems and practices. This means that the Corporation maintains systems and practices that provide it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. A significant deficiency is reported when there is a major weakness in the Corporation's key systems and practices that could prevent it from having that reasonable assurance. We noted good practices in most areas, as well as some areas where PSP Investments would benefit from certain improvements.

- The Corporation has the key elements of a strong governance framework, and its governance practices are consistent with industry practices for stewardship and oversight by boards of directors. However, the lack of the staggering of appointments to the Board of Directors, which is not under the control of PSP Investments, may potentially lead to significant turnover in the Board membership in 2014 and 2015.
- The Corporation's risk management practices, particularly in the area of investment risk, provide for identification, monitoring, management, and reporting of risks to protect its assets from undue risk of loss. The Corporation continues to develop its risk measurement and risk management capabilities, in line with industry practice.
- The Corporation's compensation framework and practices are comparable with those of the industry. Incentives for investment staff are designed to balance the need to attract and retain talented performers with the need to align behaviours with the Corporation's investment strategies, policies, and risk tolerances. Staff engaged in risk and compliance functions are compensated in a manner that maintains their independence from the areas they oversee. The Board plays an active oversight role in the design and operation of compensation practices, and reviews and monitors them independently of management.
- The Corporation regularly benchmarks its practices against those of comparable organizations in the industry. Its practices in most areas are consistent with those of the industry. However, improvements can be made in public reporting of its Responsible Investment activities in order to better align with industry practices in this area.

**The Corporation has responded.** The Corporation agrees with all the recommendations.

## About the Chapter

### Objective

The objective of this chapter was to bring to the attention of Parliament the results of the Office of the Auditor General's special examination reports that were transmitted to the boards of directors of Crown corporations between 1 January 2011 and 31 December 2011. The Crown corporations have subsequently made these reports public.

### Scope and approach

The chapter includes the main points of two special examinations where the Auditor General was the examiner, and one special examination where the Auditor General was the joint examiner.

The approach to this chapter consisted of presenting information that was already public, providing information about what a special examination is, and presenting the main points of the three special examinations.

### Audit team

Assistant Auditor General: Clyde M. MacLellan

Principal: Marise Bédard

Director: Raymond Murphy

Caroline Bérubé

For information, please contact Communications at 613-995-3708 or 1-888-761-5953 (toll-free).











Spring 2011

## Report of the Auditor General of Canada to the House of Commons

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- CHAPTER 4: Non-Filers and Non-Registrants—Canada Revenue Agency
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## **Report of the Auditor General of Canada to the House of Commons**

**Message from the Auditor General  
Main Points—Chapters 1 to 5  
Appendix**



Office of the Auditor General of Canada





Spring 2012



## **Report of the Auditor General of Canada to the House of Commons**

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**Message from the Auditor General  
Main Points—Chapters 1 to 5  
Appendix**



Office of the Auditor General of Canada

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Office of the Auditor General of Canada  
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240 Sparks Street  
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K1A 0G6

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Auditor General of Canada  
Vérificateur général du Canada

To the Honourable Speaker of the House of Commons:

I have the honour to transmit herewith this 2012 Spring Report to the House of Commons, which is to be laid before the House in accordance with the provisions of subsection 7(5) of the *Auditor General Act*.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Michael Ferguson".

Michael Ferguson, FCA

OTTAWA, 3 April 2012



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**Message from the Auditor General—Spring 2012**



# Message from the Auditor General— Spring 2012



Michael Ferguson, FCA  
Auditor General of Canada

I am pleased to present my first report to Parliament as Auditor General of Canada.

This report addresses a wide range of issues that illustrate some of the challenges facing government today:

- ensuring at the border that commercially imported consumer goods identified as potential health and safety risks conform with applicable Canadian laws and regulations;
- acquiring major defence equipment through decisions that commit the government to a course of action well into the future;
- managing Canada's interest-bearing debt;
- improving compliance with the *Income Tax Act* among those who are required to file a tax return or to register for GST/HST but who fail to do so; and
- overseeing whether aviation companies are complying with the policies, regulations, and standards required for the safety of civil aviation within Canada's borders.

The sheer magnitude of operations in the programs we examined is impressive. For example:

- The Canada Border Services Agency processed and released 13 million shipments of commercial products in the 2010–11 fiscal year.
- National Defence has budgeted \$9 billion to acquire 65 F-35 fighter jets and \$16 billion to operate and sustain them over 20 years.
- The government's interest-bearing debt managed by the Department of Finance Canada totalled \$802 billion at 31 March 2011; the interest charges that year, \$30.9 billion, represented 11.4 percent of government expenses.
- The Canada Revenue Agency's Non-Filer/Non-Registrant program generated \$2.8 billion in additional taxes, interest, and penalties assessed in each of the 2009–10 and 2010–11 fiscal years.

- Transport Canada oversees the safety practices of the second largest civil aviation aircraft fleet in the world, accounting for nearly three million flights in 2010.

With areas of responsibility on such a large scale, governments must make choices in their day-to-day operations about which services to deliver and where to focus their activities to best serve the public good. In times of fiscal restraint, choices become tougher and trade-offs must be made. Some government organizations discussed in this report are managing this challenge; others need to improve.

### **Border Controls on Commercial Imports**

Potentially unsafe products entering Canada without appropriate controls carry risks that could include illness or even death. The volume of imports into Canada is so large that it is not practical to apply controls at the border to every shipment that enters. In order to balance the requirement to examine shipments with the need to facilitate the free flow of goods, federal organizations responsible for product safety need to identify high-risk shipments on which to focus controls at the border. These controls include administering import requirements; targeting high-risk shipments, both automatically and through border lookouts; and examining intercepted shipments.

We found that in most cases, the consumer goods in our audit that pose a risk to health and safety are adequately controlled at the border by the Canada Border Services Agency (CBSA) and the federal organizations responsible for them. However, some controls need to be better managed and the results better monitored by all the organizations involved, so they know whether they are directing their resources at the highest risks.

### **Replacing Canada's Fighter Jets**

This chapter looks at two separate but related activities in National Defence. One was its participation, starting in 1997, in the United States-led, international Joint Strike Fighter program to design, develop, and manufacture the F-35 Lightning II fighter aircraft. The other was the process to acquire the F-35 as the replacement for the fleet of CF-18 Hornet fighter jets.

National Defence and Industry Canada recognized that Canada's participation in the Joint Strike Fighter (JSF) program provided opportunities for industrial benefits to Canada, and they took appropriate steps to help Canadian industry take advantage of those



opportunities. In contrast, National Defence did not recognize early enough that its involvement in the program had procurement implications. Consequently, it did not engage Public Works and Government Services Canada (PWGSC) early enough to establish a suitable process, consistent with procurement rules and including appropriate safeguards, to manage a project of this nature and magnitude.

When National Defence decided to recommend the acquisition of the F-35, it was too involved with the aircraft and the JSF Program to run a fair competition. It applied the rules for standard procurement projects but prepared key documents and took key steps out of proper sequence. As a result, the process was inefficient and not managed well. Key decisions were made without required approvals or supporting documentation. Information provided to decision makers was incomplete, and no plan was developed for extending the life of the CF-18 fleet in the event of prolonged delays in the delivery of a jet that is still being developed.

For its part, PWGSC, in its role as the government's procurement authority, did not do enough to ensure the integrity—the fairness and transparency—of the procurement process.

National Defence did not follow the basics of good management that would be expected for a \$25 billion commitment by the government. It is important that a purchase of this magnitude follow a rigorous, transparent process.

### **Interest-Bearing Debt**

Public debt and the associated interest charges consume a large amount of financial resources. They affect the government's fiscal strength, limit policy choices, and influence what we can afford as a nation. The interest-bearing debt therefore needs to be managed and reported on properly. Clearer information allows for better policy debate, including debate on how to keep public finances sustainable.

We found that the Department of Finance Canada has a sound decision-making system in place to support and develop effective market debt strategies. It has a risk management framework that allows it to respond to emerging risks and changes in funding requirements. However, the Department needs to improve its monitoring of and reporting on the overall performance of the debt management strategy to inform management decisions. And while Canada is a leader in reporting its public sector pension plan liabilities in its financial

statements, financial information on the pension plans is dispersed among several reports, making it difficult to readily understand the potential impact of these liabilities.

### **Non-Filers and Non-Registrants—Canada Revenue Agency**

Income tax is the single most important source of government revenue. For the income tax system to operate fairly and effectively, all individuals and corporations need to file returns when the law requires it, and pay the taxes they owe. Not doing so reduces the amount of money available for important government programs such as health care, education, and environmental protection. Similarly, businesses that are required to register for GST or HST, but that fail to do so, may have a negative impact on government revenues.

We found that overall, the Canada Revenue Agency's Non-Filer/Non-Registrant program works, but there is room for improvement. The Agency has not integrated its research and past experience into its planning in order to improve the program. It has validated its process for selecting files to pursue, but not for rejecting files. It needs to determine the effectiveness of both in order to ensure that it is not focusing on files with little to no tax potential.

### **Oversight of Civil Aviation—Transport Canada**

While Canada compares favourably with many other countries in its aviation safety record, any deterioration would significantly impact public confidence. This makes it critical that Transport Canada maintain a robust and effective regulatory framework for civil aviation safety. The Department's civil aviation safety program puts the onus on large aviation companies to develop safety management systems in accordance with regulations, while the Department oversees their compliance.

We found that Transport Canada has made real progress in its new approach to safety oversight. It has revised its surveillance methodology to be consistent with this approach, and its rigorous regulatory framework for civil aviation safety is consistent with international standards. However, the Department can take a long time to address emerging safety concerns—in some cases, more than 10 years. We also found that the Department is not adequately managing the risks associated with its oversight of civil aviation. There are weaknesses in how it plans, conducts, and reports on its surveillance activities. For example, in the 2010–11 fiscal year, only two thirds of planned inspections were carried out—which is significant, since only

the higher-risk aviation companies are selected for inspection in any given year. In addition, Transport Canada has not yet identified how many inspectors and engineers it will need to oversee civil aviation—something it agreed to do in 2008 when we recommended it.

### **Special Examinations of Crown Corporations—2011**

The final chapter in this report presents the main points of special examination reports on Crown corporations that were issued to the corporations' boards of directors between 1 January 2011 and 31 December 2011 and that the corporations subsequently made public. A special examination is an important accountability mechanism for Crown corporations. It provides an independent opinion on whether there is reasonable assurance that a Crown corporation has systems and practices in place to ensure that its assets are safeguarded and controlled; its financial, human, and physical resources are managed economically and efficiently; and its operations are carried out effectively. Any major weakness in the key corporate systems and practices that could prevent a corporation from achieving those objectives is reported as a significant deficiency.

I am pleased to note that we found no significant deficiencies in our 2011 special examinations of the Canadian Dairy Commission, the Canadian Race Relations Foundation, and the Public Sector Pension Investment Board.

### **Conclusion**

The government's decisions have significant consequences for the citizens of this country. In the current environment of managing with less, the challenge for public servants is to maximize the potential benefits of choices and trade-offs and to minimize negative consequences.

On a personal note, I would like to acknowledge the efforts by staff of the Office of the Auditor General to make my introduction to the Office a smooth transition for everyone, even in the midst of our own operational review. I have joined a strong institution, with people who approach the work of the Office with dedication and professionalism. I look forward to working with them, with Members of Parliament, and with government officials to meet the challenges that Canada faces over the next decade.



## **Main Points—Chapters 1 to 5**





# Border Controls on Commercial Imports

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## Chapter 1 Main Points

### What we examined

Under various acts and regulations, federal government organizations are responsible for ensuring the safety of commercially imported consumer goods that have been identified as a risk to the health and safety of Canadians. The Canada Border Services Agency (CBSA) is tasked with ensuring that commercially imported consumer goods enter Canada in conformity with applicable laws and regulations.

To achieve this, the CBSA works with other federal government organizations to implement controls at the border. Controls at the border include administration of import requirements (for example, permits and authorizations), detection and interception of shipments targeted by federal organizations as high risk or non-compliant, and examination of selected shipments for admissibility into Canada. These controls are part of a broader product safety regime that also includes both pre- and post-border controls, such as licensing and market surveillance, and is supported by importers' voluntary compliance. The regime is intended to control any high-risk products that are allowed to enter the country and thereby help ensure the safety of imported products in the marketplace.

We examined the part of the product safety regime that is implemented at the border. Looking at selected commercially imported goods—including fertilizers, health products, pest control products, consumer products, consumer fireworks, vehicles, and tires—we examined how the CBSA, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada work together to ensure that products comply with applicable legislation when they enter Canada.

Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

The volume of imports into Canada is so large that it is not practical for federal organizations to apply border controls to every shipment, nor is it necessary. According to the CBSA, it processed and released 13 million shipments of commercial products in the 2010–11 fiscal year, about four million of which were subject to federal import requirements. Federal organizations must balance the requirement to examine shipments with facilitating the free flow of goods. To do this, they need to have systems and practices that can identify and concentrate on high-risk shipments of commercially imported products.

Potentially unsafe products entering Canada without appropriate controls carry risks that could include illness and death. Even a less serious incident can have a significant effect on Canadian consumer confidence in imported products.

### What we found

- In most cases, imported consumer goods in our audit that pose a risk to the health and safety of Canadians are adequately controlled at the border by the Canada Border Services Agency, the Canadian Food Inspection Agency, Health Canada, Natural Resources Canada, and Transport Canada. With a few exceptions, the administration of import requirements and automatic targeting of high-risk shipments are working as intended.
- In the small percentage of cases where goods that did not meet import requirements were allowed to enter the country, most were products for which there was no agreement in place between Health Canada and the CBSA. While the CBSA has formal arrangements with the three other organizations in our audit, as yet it has no formal agreement with Health Canada that documents respective roles, responsibilities, policies, and procedures for implementing controls on several products under Health Canada's responsibility, such as medical devices and pest control products. Until there is a formal agreement, border services officers do not have consistent instructions on procedures to follow for those products.
- Border lookouts and examinations are reserved for higher-risk shipments and they consume resources, yet their results are poorly documented. For example, examination results were recorded incorrectly or incompletely in 40 percent of cases we examined. Consequently, we could not determine whether the examinations are working as intended, nor can the organizations requesting them. Moreover, among the audited organizations there are gaps in the monitoring of all three border controls. For example, the CBSA's target monitoring reports are inaccurate and incomplete. These gaps

make it difficult for federal organizations to know how well the controls are working and where resources and effort can be directed most effectively to manage risk.

**The entities have responded.** The entities agree with all of the recommendations. Their detailed responses follow the recommendations throughout the chapter.

# Replacing Canada's Fighter Jets

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## Chapter 2 Main Points

### What we examined

Canada currently operates a fleet of CF-18 Hornet fighter jets purchased in the 1980s with an original life expectancy until 2003, since extended to between 2017 and 2020 after a modernization program in early 2000. National Defence has determined that a suitable replacement for the CF-18 is required, or it will lose its ability to carry out domestic and international missions mandated by the Government of Canada.

National Defence has been a partner in the Joint Strike Fighter (JSF) Program since 1997. Led by the United States, and with eight other country partners, the Program is undertaking concurrent design, development, and manufacturing of the F-35 Lightning II aircraft. It will eventually include a regime for long-term collaborative sustainment. Canada's participation has been formalized by signing international memoranda of understanding—in 1997, 2002, and 2006—for each of the three major phases of the JSF Program. As of September 2011, the government had disbursed about CAN\$335 million toward participation in the JSF Program and related support to Canadian industry. The government has committed a total of US\$710 million to the Program.

In May 2008, through the *Canada First* Defence Strategy, the federal government announced its intent to replace the CF-18 fleet with 65 “next generation” fighter aircraft. Then, in July 2010, the government announced its decision to buy the F-35 Lightning II, without following a competitive process, as the CF-18 replacement.

We examined whether National Defence, Industry Canada, and Public Works and Government Services Canada exercised due diligence in managing Canada's participation in the JSF Program and in managing the federal decision-making process to acquire the F-35 as a replacement for the CF-18.

Our conclusions relate only to the management practices and actions of public servants. We did not audit private sector contractors and, consequently, our conclusions do not pertain to the contractors' practices or to their performance. We did not audit the merits of the F-35 aircraft.



Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Buying major defence equipment is subject to decision-making and project management processes whose aim is to ensure that decisions are well founded, projects are managed effectively, and goods and services are acquired in a way that enhances supplier access, competition, and fairness. National Defence, Industry Canada, Public Works and Government Services Canada (PWGSC), and central agencies are involved.

Buying and maintaining the F-35, or any other fighter jet, will require a significant long-term financial commitment. The F-35 is still being developed and tested, and projections of purchase price and sustainment costs are still being refined. Decisions taken to date as well as those yet to come will have impacts for the next 40 years.

### What we found

- National Defence took the appropriate steps in managing Canada's participation in the Joint Strike Fighter (JSF) Program to develop the F-35. National Defence engaged Industry Canada early, and together they managed industrial participation well. Early efforts to secure contract opportunities for Canadian companies were successful.
- There were significant weaknesses in the decision-making process used by National Defence in acquiring the F-35 to replace the CF-18. By the end of 2006, the Department was actively involved in developing the F-35, and a number of activities had put in motion its eventual procurement. In the lead-up to the government's 2010 announcement, required documents were prepared and key steps were taken out of sequence. Key decisions were made without required approvals or supporting documentation.
- PWGSC did not fully carry out its role as the government's procurement authority. Although it was not engaged by National Defence until late in the decision-making process, PWGSC endorsed the key decision to sole source the acquisition of the F-35 in the absence of required documentation and completed analyses. By that time, practically speaking, Canada was too involved with the aircraft and the JSF Program to run a fair competition.
- National Defence did not provide complete information in a timely manner. For example, briefing materials prepared for decision makers did not explain the basis for and limitations of projections of industrial benefits to Canadian companies, and the risks of relying on the projections for decision making. In addition, briefing materials

did not inform senior decision makers, central agencies, and the Minister of the problems and associated risks of relying on the F-35 to replace the CF-18. Nor did National Defence provide complete cost information to parliamentarians.

- National Defence likely underestimated the full life-cycle costs of the F-35. The budgets for the F-35 acquisition (CAN\$9 billion) and sustainment (CAN\$16 billion) were initially established in 2008 without the aid of complete cost and other information. Some of that information will not be available until years from now. If the budgets prove insufficient to cover total costs, the Department will have to find ways to cover additional costs that may be incurred. Alternatively, it may have to seek additional funds from the government or use funds from other parts of its capital or operating budgets.

**The departments have responded.** National Defence agrees with our recommendation. Its response follows the recommendation.

National Defence, Industry Canada, and Public Works and Government Services Canada have accepted the facts presented in the chapter. Both National Defence and Public Works and Government Services Canada disagree with the conclusions set out in paragraphs 2.80 and 2.81.

# Interest-Bearing Debt

## Chapter 3 Main Points

### What we examined

Debt management refers to how the Government of Canada raises funds to meet its borrowing requirements, what it decides and does about the composition of the market debt, and how it governs these activities. The Government of Canada's interest-bearing debt is made up of principally two sets of liabilities: market debt and public sector pension plan liabilities. Market debt is the part of the debt that the government borrows in financial markets and that is managed by the Department of Finance Canada. It totalled \$597 billion at 31 March 2011. Public sector pension plan liabilities are part of the non-market debt. These liabilities represent the government's obligations to the employee pension plans of the public service, Canadian Forces, and Royal Canadian Mounted Police (RCMP). They totalled \$146 billion at 31 March 2011.

Together, market debt and the pension plan liabilities make up over 92 percent of the interest-bearing debt, which totalled \$802 billion at 31 March 2011. In 2010–11, interest charges on the debt totalled \$30.9 billion and represented 11.4 percent of government expenses.

We examined how the Department of Finance Canada develops strategies to manage market debt. We looked at its risk management practices and at how it monitors and reports on performance of the debt-funding strategy. We also examined how the Department of Finance Canada and the Treasury Board of Canada Secretariat report information about charges on the interest-bearing debt as well as the budgetary impact of the public sector pension plan liabilities.

Audit work for this chapter was substantially completed on 31 October 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Debt management is the federal government's largest program (after transfers to seniors and to other levels of government). How market debt is managed has a direct impact on the government's fiscal strength. Debt managers need to set appropriate market debt strategies using robust processes and tools—first, to balance costs and risks so

that low-cost and stable funding can be raised, and second, to support well-functioning markets for Government of Canada securities.

Deteriorating sovereign debt conditions in the Euro zone and in the United States show the importance of having sound debt strategies, as they provide stability and assurance to market participants. Sound debt strategies will also support the fiscal sustainability of public finances in the long term.

In addition to market debt, public sector pension plan liabilities and associated debt charges have a large impact on the government's fiscal situation. It is therefore important that Canadians be provided with clear information on that debt, the associated interest charges, and their impact on budget deficits or surpluses. The significant amounts involved can influence policy choices by limiting what the government can afford to do.

### What we found

- In developing its debt strategies, the Department of Finance Canada uses a sound process that relies on a detailed and robust debt strategy model and on the judgment of senior managers as well as on consultations with dealers and investors. The model and the qualitative/quantitative analyses help debt managers recommend preferred debt structures, and are major advances since our last audit 12 years ago.
- The Department is monitoring and achieving the objective of a well-functioning market for Government of Canada securities. Until recently, it was using metrics that did not provide a full assessment of the extent to which it was achieving the objective of raising low-cost, stable funding for the Government of Canada by arriving at a desired debt structure that strikes a balance between costs and risks. Subsequent to the period under review, the Department started monitoring better the extent to which it balances costs and risks, but it cannot yet demonstrate that the debt strategy is achieving the low-cost, stable funding objective. While the Department publishes clear information on the market debt, it could publish more details to indicate why a particular debt strategy was chosen and how well the program is performing.
- The Department of Finance Canada has a sound risk management framework in place to assess and monitor emerging risks as well as changes in financial requirements that could affect the debt strategy. However, it does not promote Government of Canada securities to market participants as well as it could to appeal to a broader base of investors.

- Canada is a leader among member countries of the Organisation for Economic Co-operation and Development (OECD) in recognizing in its financial statements the obligations arising from public sector employee pension plans. In fact, very few other countries report these obligations on their financial statements. However, while complete financial information on the pension plans is available, it is dispersed among several reports and not presented in easy-to-read formats. It is therefore difficult for parliamentarians and Canadians to readily understand the potential impact of these liabilities on the budgetary balance and how they influence policy choices. In addition, the composition of projected interest charges reported in the Estimates is not clearly presented. Finally, the Department of Finance Canada does not have timely access to the quarterly updates from the Public Sector Pension Investment Board about actual returns on public sector pension investments, which would help the Department assess the impact that unforeseen fluctuations could have on budget surpluses or deficits.

**The entities have responded.** The entities have agreed with our recommendations. Their detailed responses follow the recommendations throughout the chapter.



# Non-Filers and Non-Registrants— Canada Revenue Agency

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## Chapter 4 Main Points

### What we examined

The Canada Revenue Agency works to ensure that Canadians pay their required share of taxes and that the revenue base is protected. It is responsible for administering the *Income Tax Act*, which specifies when taxpayers are required to file a return. A non-filer is an individual, a corporation, or a trust who fails to file a tax return as required by legislation.

Under the *Excise Tax Act*, businesses that meet certain criteria are required to register for the goods and services tax/harmonized sales tax (GST/HST). Non-registrants are businesses that fail to comply with this requirement.

The Agency, through its Non-Filer/Non-Registrant (NF/NR) program, works to encourage individuals, corporations, and trusts to comply with the filing requirement and, in the case of businesses, with the GST/HST registration requirements. In the 2010–11 fiscal year, the NF/NR program's salary budget was \$39 million of the Agency's total budget of \$4.5 billion, and it employed 700 of the Agency's approximately 39,000 employees. This relatively small program area generated \$2.8 billion of additional taxes, interest, and penalties assessed in each of the 2009–10 and 2010–11 fiscal years.

We looked at what the Agency has done to address non-compliance with filing and registration requirements. The audit focused on how the Agency identifies non-filers and non-registrants and how it plans, monitors, and reports on its actions to improve compliance.

Audit work for this chapter was substantially completed on 5 January 2012. Further details on the conduct of the audit are in **About the Audit** at the end of the chapter.

### Why it's important

Income tax is the single most important source of government revenue. For the income tax system to operate fairly and effectively, it is important that all individuals and corporations file returns when they are required by law to do so, and that they pay the taxes they owe. Not doing so reduces the amount of money available for important government programs such as health care, education, and the

environment. Similarly, businesses that are required to register for GST or HST, but do not, may have a negative impact on government revenues. The Agency has identified non-filers and non-registrants as high-priority issues to address, as part of its efforts to combat non-compliance, including the underground economy.

### What we found

- Because the Agency does not have the resources to pursue all non-filers, it has developed a risk-scoring model to identify those it will pursue. Agency analysis indicated that the files it chooses to pursue result in returns filed and taxes assessed. However, it has not tested its screening to determine whether the files it chooses not to pursue from the initial 2.5 to 3 million files identified by the matching process should in fact be pursued. In addition, two thirds of the files initially selected for pursuit in the field are later determined to have low potential, and work on them is discontinued. In other words, the Agency does not know if its risk-scoring process is as effective as it could be.
- The Agency uses identification projects to find taxpayers who may be participating in the underground economy. The majority of projects completed were meeting or exceeding their targets for number of tax returns filed and amounts assessed.
- The Agency's planning process tends to repeat actions from one year to the next to identify non-filers and non-registrants. While it considers the cost of its processes to pursue these files when planning work, the Agency is not taking advantage of its research findings in its work plans in order to improve its results in achieving compliance.
- Current performance indicators focus on routine program activities—for example, tax dollars and the number of taxpayers assessed—rather than on the longer-term impact of the program, in particular the Agency's success at getting non-compliant taxpayers to change their behaviour and file their returns. Various audits and program evaluations over the years have recommended action to develop additional performance measures and risk management of the Non-Filer/Non-Registrant (NF/NR) program and to improve its use of internal and external information. The Agency has made limited progress in implementing many of these recommendations.

**The Agency has responded.** The Agency agrees with all of the recommendations. Its detailed responses follow the recommendations throughout the chapter.

# Oversight of Civil Aviation— Transport Canada

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## Chapter 5 Main Points

### What we examined

Aviation companies that want to operate commercially in Canada must obtain an authorization. In 2011, there were more than 5,000 companies authorized to operate and more than 34,000 aircraft registered in Canada. To maintain their authorization to operate, these companies must meet the minimum safety standards required for the safe conduct of civil aviation.

The minimum safety standards for aviation companies fall under the *Aeronautics Act* and the *Canadian Aviation Regulations*. The Act and the regulations form the main part of the regulatory framework for civil aviation. The overall responsibility for the maintenance of safe, regular, and efficient civil aviation operations, including the manufacturing and maintenance of aircraft, rests with the aviation industry.

Transport Canada is responsible for developing and administering the policies, regulations, and standards required for the safe conduct of civil aviation within Canada's borders. The Department is also responsible for overseeing whether aviation companies have complied with this safety framework, and for taking appropriate enforcement action where necessary. In 2009–10, Transport Canada spent over \$148 million and dedicated about 1,400 employees to monitoring civil aviation across Canada.

Our audit examined whether the Department has managed the risks associated with overseeing its civil aviation safety program. We focused on Transport Canada's surveillance of air carriers, aircraft maintenance organizations, and airports in the National Airports System.

Audit work for this chapter was substantially completed on 30 September 2011. Further details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Transport Canada plays a key role in helping to ensure that Canada's civil aviation safety framework meets minimum international safety standards. While Canada compares favourably with many other countries in its aviation safety record, any deterioration would significantly impact public confidence. This makes it critical that

Transport Canada maintain a robust and effective regulatory framework for civil aviation safety, especially since the International Civil Aviation Organization (ICAO) has projected a significant growth in aviation until 2025.

Identifying aviation companies that present safety risks is a highly complex process that relies heavily on the judgment and experience of Transport Canada's inspectors across Canada and on the information that is made available to them.

The Department's inspectors cannot be continuously present in all aviation companies to assess their compliance with aviation safety standards. Consequently, Transport Canada must use risk management techniques to decide where, when, how often, and in how much depth it inspects aviation companies in order to obtain sufficient assurance that they are complying with Canada's aviation safety requirements. If Transport Canada does not manage these surveillance risks well, it is unlikely to focus its scarce resources on aviation companies and operations that represent the highest risks.

### What we found

- Transport Canada has developed a rigorous aviation safety regulatory framework that is consistent with standards established by the International Civil Aviation Organization, but it can take a long time to address emerging safety issues—in some cases, more than 10 years. The Department has yet to fully implement a process that will address these issues more quickly.
- Since 2008, Transport Canada has made progress in evolving from the traditional surveillance approach—largely based on responding to regulatory requirements—to a systems-based approach designed for large and small aviation companies. This approach allows for more consistent and rigorous surveillance of aviation companies' compliance with safety regulations.
- While some aspects of the new surveillance program are working well, there are weaknesses in critical areas. For example, information for assessing the risk indicators that Transport Canada uses to identify the high-risk aviation companies that should be inspected is not always available or kept up to date. A minimum acceptable level of surveillance has not been clearly established to indicate how long aviation companies can operate without being inspected, and only two thirds of planned inspections have been carried out. Most inspections are not fully conducted according to established methodology and are subject to little management oversight.

In addition, documentation of key decisions is weak. Finally, Transport Canada lacks a quality assurance program to continuously improve its surveillance program.

- Transport Canada recently developed a national human resources plan for the oversight of civil aviation to help ensure that it has the resources it needs to carry out its safety regulatory program. However, the plan does not specify the number of inspectors and engineers that are needed, although the Department agreed to provide these figures in its response to our 2008 recommendation. The Department has made progress with implementing key human resources strategies, but efforts to fully implement the new surveillance approach have been hampered by the lengthy reorganization and by resistance from some inspectors.

**The Department has responded.** The Department agrees with all of our recommendations. Its detailed responses follow each recommendation throughout the chapter.



## **Appendix**



## **Appendix** Report on the audit of the President of the Treasury Board's *Annual Report to Parliament on the Tabling of Crown Corporations' Reports 2011*

### **Tablings in Parliament for parent Crown corporations: Annual reports and summaries of corporate plans and budgets**

Section 152 of the *Financial Administration Act* (the Act) requires the President of the Treasury Board to lay before each House of Parliament, a report on the timing of the tabling, by appropriate ministers, of annual reports and summaries of corporate plans and of budgets of Crown corporations. This report must be tabled by 31 December.

The Act requires the Auditor General of Canada to audit the accuracy of the President of the Treasury Board's report on the timing of tabling and to present the results in his annual report to the House of Commons.

The President of the Treasury Board's *Annual Report to Parliament on the Tabling of Crown Corporations' Reports 2011* was tabled on 9 December 2011.

At the time that our Fall 2011 report was going to print, we were unable to include the results of the above audit, since the President of the Treasury Board's report had not yet been finalized. Our auditor's report was subsequently appended to the President's report and is reproduced in this report to Parliament.

## Auditors' Report

To the House of Commons:

As required by subsection 152(2) of the *Financial Administration Act*, I have audited, for the year ended 31 July 2011, the information contained in the *Annual Report to Parliament on the Tabling of Crown Corporations' Reports 2011*. The information contained in the report is the responsibility of the President of the Treasury Board. My responsibility is to express an opinion on the information contained in the report based on my audit.

I conducted my audit in accordance with the standards for assurance engagements established by the Canadian Institute of Chartered Accountants. Those standards require that I plan and perform an audit to obtain reasonable assurance as to whether the information contained in the report is free of significant misstatement. My audit included examining, on a test basis, evidence supporting the dates and other disclosures provided in the report.

In my opinion, the information contained in the *Annual Report to Parliament on the Tabling of Crown Corporations' Reports 2011* is accurate, in all significant respects, with the section "Deadlines for tabling in Parliament" contained within the report.



Lucie Cardinal, CA  
Principal  
for the Interim Auditor General of Canada

2 November 2011  
Ottawa, Canada









Spring 2013

## Report of the Auditor General of Canada to the House of Commons

### Message from the Auditor General Main Points—Chapters 1 to 5 Appendix

- CHAPTER 1 Border Controls on Commercial Imports
- CHAPTER 2 Replacing Canada's Fighter Jets
- CHAPTER 3 Interest-Bearing Debt
- CHAPTER 4 Non-Filers and Non-Registrants—Canada Revenue Agency
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- APPENDIX Special Examinations of Crown Corporations—2011











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